PRELIMINARY ASSESSMENT EQUIVALENT REPORT
SCHMIDT'S BREWERY SITE
9300 QUINCY AVENUE
CLEVELAND, CUYAHOGA COUNTY, OHIO
TDD: S05-9611-013
PAN: 6B132MSIXX
CERCLIS ID: OHD986975233

April 5, 1999

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Site Assessment Section
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: Justin Bowerman Date: 4-5-99
Justin Bowerman, START Project Manager

Reviewed by: Karen Kirchner Date: 4-5-99
Karen Kirchner, START Assistant Program Manager

Approved by: Mary Jane Ripp Date: 4/5/99
for Mary Jane Ripp, START Program Manager

ecology and environment, inc.
6777 ENGLE ROAD, CLEVELAND, OHIO 44130, TEL. (216) 243-3330
International Specialists in the Environment

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1. Introduction

The Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START) has been tasked by the United States Environmental Protection Agency (U.S. EPA) to complete a Preliminary Assessment (PA) Equivalent Report for the Schmidt's Brewery site under Technical Direction Document (TDD) S05-9611-013. The PA Equivalent Report is based on information and data from the Site Assessment Report prepared by E & E, and information provided by U.S. EPA, E & E, and Ohio Environmental Protection Agency (OEPA) personnel familiar with the site. Additional information, including photodocumentation and validated analytical data, are available in the U.S. EPA Region 5 site file.

2. Site Description

The Schmidt's Brewery site is a former brewery located at 9300 Quincy Avenue in Cleveland, Cuyahoga County, Ohio (Appendix A). The geographical coordinates for the site are latitude 41°29'33.1" N and longitude 81°37'11.1" W. The site is bordered to the west by East 93rd Street; to the north by Quincy Avenue, several residences, commercial properties, and vacant lots; and to the south and the east by a Penn Central Railroad yard, where scrap metal is stored and processed.

The site file does not contain detailed information on the operating history of the site. The brewery was closed in the late 1980s and Stern Enterprises, Inc.(Stern), became the site owner by 1989 (Appendix B).

The majority of the site is covered by manmade land features consisting of concrete, asphalt, and the remnants of building structures. A large open pit (30 feet deep by 100 feet wide by 150 feet long) that formerly existed in the northwestern corner of the site has been filled (Appendix C). The site is surrounded by an 8-foot-high fence that is not locked, making the site easily accessible.

The surface of the site is generally flat. Surface water runoff from the site flows to Quincy Avenue and East 93rd Street and discharges into storm sewers. The nearest surface water body, the Baldwin Reservoir, is located approximately 0.33 mile to the northeast of the site. Doan Brook is located approximately 0.5 mile northeast of the site. Doan Brook discharges into Lake Erie approximately 4 miles north of the site. A municipal water supply provides drinking water to the site vicinity (Appendix C). The source for the municipal water supply in Cleveland is off-shore intakes in Lake Erie. The closest off-shore intake is located approximately 9 miles north of the site. The site geology is comprised of manmade materials, sand, gravel, silt, clay, and shale (Appendix D). Sand and gravel deposits in the area are poorly sorted and include shale fragments. Silt and clay layers in the area of the site range in thickness from 4 to 14 feet. The uppermost layer of bedrock consists of shale.

The population within a 1-mile radius of the site is approximately 20,539 persons, and the population within a 2-mile radius of the site is approximately 90,775 persons (Appendix E). The nearest

residence is located approximately 100 feet west of the site.

3. Previous Assessment and Removal Activities

In August 1989, representatives of the Cleveland Division of Air Pollution Control (CDAPC) observed the unauthorized removal of asbestos-containing material (ACM) at the then-closed site (Appendix B). The workers doing the ACM removal were not licensed and notification of the ACM removal had not been filed. CDAPC referred the case to the U.S. EPA Environmental Services Division (ESD). On September 29, 1989, U.S. EPA ESD and OEPA inspected the site and witnessed the migration of dry, friable material from a building through broken windows. OEPA issued a notice of violation (NOV) to Stern, the potentially responsible party (PRP), and U.S. EPA ESD referred the site to the Emergency and Enforcement Response Branch (EERB) for further investigation.

On March 29, 1990, U.S. EPA and the Roy F. Weston, Inc., Technical Assistance Team (TAT) conducted a site assessment at the Schmidt's Brewery site that included air sampling. Analysis of air samples collected at a broken window in the brewery indicated that ACM was being released from the facility and a threat of exposure to the surrounding community was present (Appendix B). U.S. EPA instructed Stern to seal the facility to prevent the further release of ACM; to wet and cover the ACM; and to begin ACM removal with a qualified, licensed crew. On April 5, 1990, CDAPC reported to U.S. EPA that the facility was sealed and that abatement work had begun.

On May 1, 1991, a representative from OEPA conducted a site investigation following a complaint of vandalized transformers. Three salvaged transformers were observed in the basement of a building located on site. Analysis of wipe samples collected from the transformers indicated the presence of polychlorinated biphenyls (PCBs) at concentrations less than 14 micrograms per square meter ($\mu g/m^2$) (Appendix C). OEPA issued a compliance letter to the estate of Earnest Stern, the current PRP.

On October 7, 1993, a contractor for the PRP began sampling in the basement of one building (Building 12) located on site. Analysis of oil samples collected from the transformer revealed 850,000 parts per million (ppm) of PCBs (Appendix C). Water samples collected from the basement floor indicated the concentration of PCBs at 900 micrograms per liter ($\mu g/L$). Analysis of sediment samples collected

from the basement revealed PCB concentrations of 290,000 ppm. It was noted at the time of sampling that a PCB transformer in the building had been vandalized and the copper connecting rods had been removed.

On November 3, 1993, a representative from OEPA investigated the on-site spill and discovered a 245-gallon transformer in the basement of Building 12. The OEPA representative observed 3 feet of water (approximately 160,000 to 200,000 gallons) in the basement. Apparently, gauges had been removed from the transformer, allowing oil to escape onto the floor of the basement. Seventy-two large, low-voltage capacitors suspected to contain PCBs were also observed. Five of the capacitors were later determined to be leaking.

A contractor for the PRP drained the 245-gallon transformer on December 6, 1993 (Appendix C). It was estimated that 52 gallons of oil had leaked out of the transformer. The PCB transformer and the 72 large PCB capacitors were removed and shipped off site for disposal on May 1, 1995. An additional 68 large PCB capacitors were discovered in the basement and also removed and shipped off site for disposal. The contractor for the PRP removed PCB-contaminated soil and debris from the site. The PCB-contaminated soil was excavated and removed from the site, creating a large pit on the northwest corner of the site. Groundwater that continually recharged into the pit was pumped out and treated by the PRP's contractor. The removal of contaminated soils continued from 1995 to 1997.

On March 18, 1997, representatives from U.S. EPA, START, OEPA, and the PRP's contractor met on site. Site assessment activities were performed by U.S. EPA and START due to increased community concern regarding site conditions. At the time of the assessment, the buildings had been demolished and there was a pit located on the northwestern corner of the site that measured approximately 30 feet deep by 100 feet wide by 150 feet long. There were two trenches that were approximately 10 feet deep within the pit. One trench was located in the northeastern corner of the pit and measured approximately 20 feet wide by 60 feet long. The second trench was located in the southwestern corner of the pit and measured approximately 15 feet wide by 20 feet long. A large STET pile consisting of soil and rock existed in the southwest corner of the pit. START collected 11 soil samples and two water samples from the site. START collected split samples for the PRP contractor. Analysis of surface water samples collected from the pit revealed PCBs in concentrations ranging from 200 µg/L to 1,010 µg/L (Aroclor 1260). Soil samples collected from inside the pit, trench walls, and spoil piles contained PCBs in concentrations ranging from 0.1 milligrams per kilogram (mg/kg) to 700 mg/kg (Aroclor 1260).

The PRP's contractor continued to remove PCB-contaminated soil following the site assessment activities. On March 16, 1998, START member Justin Bowerman contacted OEPA representative Tom

Buchan to discuss removal operations following the March 18, 1997, site assessment performed by START. According to Buchan, the contractor continued to excavate contaminated soil until they encountered the foundation of a building, thus prohibiting further excavation. Analysis of soil samples indicated that PCBs were still present at a concentration of approximately 490 mg/kg. The PRP's contractor installed three on-site monitoring wells. Analysis of groundwater samples collected from the three monitoring wells did not detect the presence of PCBs (Appendix C). By June of 1998, a total of five monitoring wells were present on site. Analysis of groundwater samples collected from the five monitoring wells did not detect the presence of PCBs. Currently, the pit has been backfilled and only one monitoring well remains on site (Appendix C). All hazardous materials have been removed from the site and the U.S. EPA Removal Section has no further plans for the site (Appendix F).

4. Migration and Exposure Pathway Factors and Targets

This section discusses the migration and exposure pathways and targets associated with the Schmidt's Brewery site. Section 4.1 discusses the groundwater migration pathway; Section 4.2 discusses the surface water migration pathway; Section 4.3 discusses the soil exposure pathway; and Section 4.4 discusses the air migration pathway.

4.1 Groundwater Migration Pathway

There was no documented observed release to groundwater during the U.S. EPA site assessment. Analysis of samples collected from the on-site monitoring wells did not detect the presence of PCBs. Groundwater is not used as a source of drinking water in the city of Cleveland (Appendix G).

4.2 Surface Water Migration Pathway

There was no documentation of off-site contamination via the surface water pathway, due to the isolated location (below ground) of the source. However, surface water samples collected from the on-site pit revealed PCB concentrations ranging from 200 µg/L to 1,010 µg/L. Surface water runoff from the site flows into storm sewers located on Quincy Avenue and East 93rd Street. The nearest surface water body, the Baldwin Reservoir, is located approximately 0.33 mile to the northeast of the site. Doan Brook is located approximately 0.5 mile northeast of the site. Doan Brook discharges into Lake Erie approximately 4 miles north of the site. A municipal water supply provides drinking water to the site vicinity and the city of Cleveland. The source of drinking water for the municipal water supply is off-shore intakes in Lake Erie. Lake Erie is located approximately 4 miles north of the site. The closest off-shore intake is located approximately 9 miles north of the site. No apparent threat to nearby terrestrial sensitive environments was documented.

4.3 Soil Exposure Pathway

START documented soil contamination during the U.S. EPA site assessment conducted in 1997. No apparent threat to nearby residents was documented; however, soil samples were not collected from the yards of the residences around the site. The PRP's contractor excavated and removed PCB-contaminated soil from the site. Removal efforts created a large pit in the northwest corner of the site. Analysis of soil samples collected by START from the pit revealed PCBs ranging in concentrations from 0.1 mg/kg to 700 mg/kg (Aroclor 1260). Further analysis of soil samples collected by the PRP's contractor indicated the presence of PCBs in concentrations as high as 490 mg/kg. The contaminated soil was located in the pit, 40 feet below the ground surface. The pit has been backfilled; therefore, it is not likely that contamination from the site would migrate to the area residences. The site is abandoned and surrounded by an 8-foot-high fence that is not locked. Past incidents of vandalism have occurred on site. Census data indicates that approximately 90,775 people reside within a 2-mile radius of the site (Appendix E). The nearest residence is located approximately 100 feet west of the site and the nearest school is located approximately 0.5 mile northwest of the site.

4.4 Air Migration Pathway

No readings above background levels were detected on the photoionization detector during sampling activities at the time of the U.S. EPA site assessment. However, comprehensive air sampling has not been performed at the site.

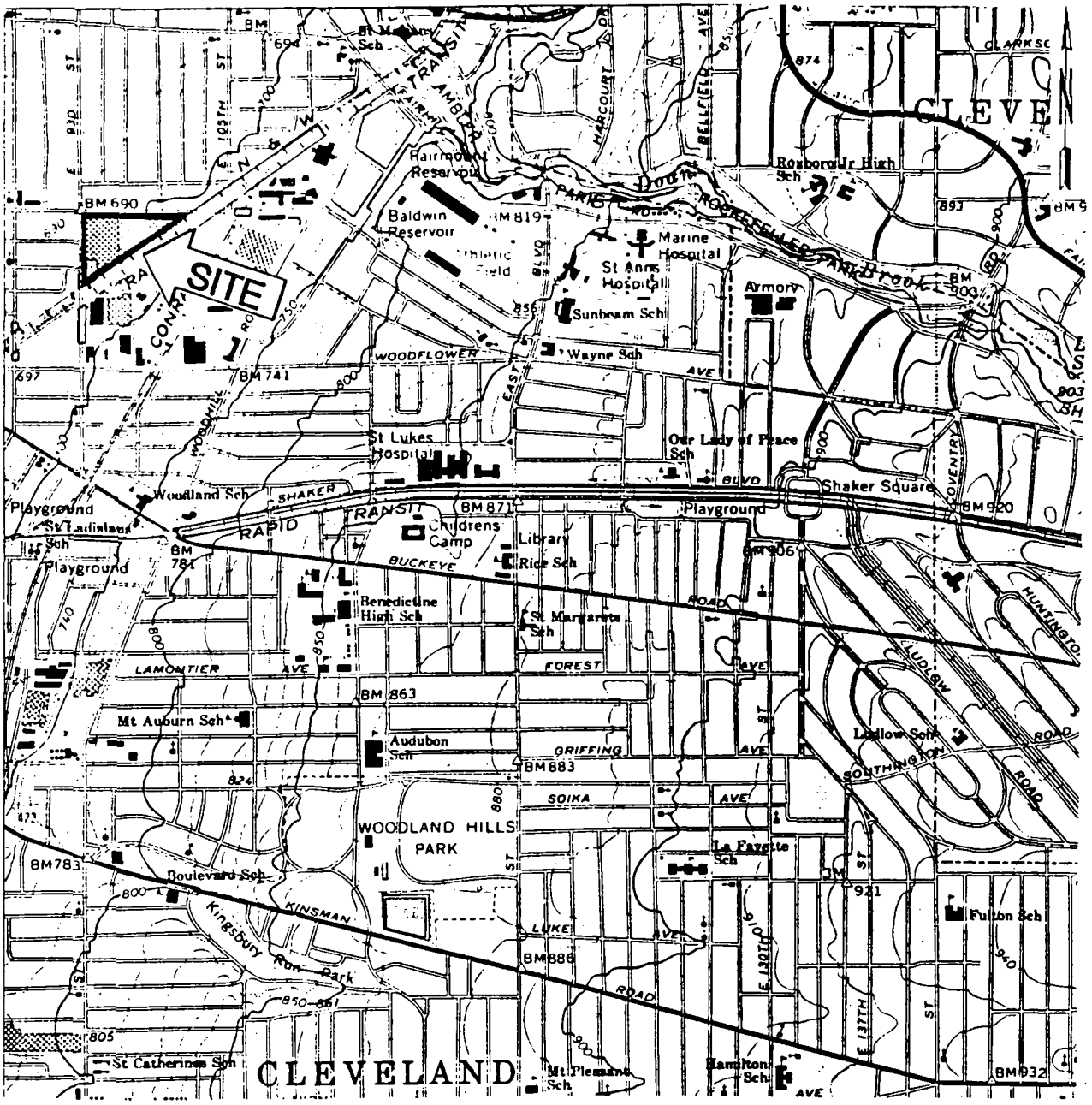
5. Summary

The Schmidt's Brewery site is the location of a former brewery with PCB-contaminated soil and debris in Cleveland, Cuyahoga County, Ohio. The majority of the site is comprised of manmade materials, including asphalt and concrete, and is barren. During a removal action, the PRP's contractor excavated contaminated soil from the site, forming a large pit. Excavation continued until the foundation of a former building was encountered, prohibiting further excavation. Groundwater that continually recharged into the pit was pumped out and treated by the PRP's contractor. During the removal action, the PRP's contractor also removed PCB transformers and several capacitors from the site. Analysis of surface water samples collected from the pit revealed PCBs in concentrations ranging from 200 µg/L to 1,010 µg/L (Aroclor 1260). Soil samples collected from inside the pit, trench walls, and spoil piles contained PCBs in concentrations ranging from 0.1 mg/kg to 700 mg/kg (Aroclor 1260). Five on-site monitoring wells existed on site at one time; however, only one well remains. Analysis of groundwater samples collected from the monitoring wells did not indicate the presence of PCBs. The pit has been backfilled and there is no hazardous waste remaining on site. The U.S. EPA Removal Section plans no further action at the site.

Appendix A

Site Location Map

Source: Ecology and Environment, Inc., 1997, *Site Assessment Report for Schmidts Brewery,* Cleveland, Cuyahoga County, Ohio.



Quadrangle Location

ecology and environment, inc.
Superfund Technical Assessment and Response Team
Region V
6777 Engle Rd., Middleburg Hts., Ohio 44130

TITLE Site Location Map	FIGURE 2-1
SITE Schmidts Brewery	SCALE 1:24,000
CITY Cleveland STATE Ohio	PAN 7F2101SI
SOURCE USGS 7.5 Minute Series, Shaker Heights, Ohio	DATE Revised 1979

Appendix B

Site Assessment Report (September 1990)

WESTON MANAGERS DESIGNERS/CONSULTANTS SM River Center, 111 North Canal Street, 8th Floor, Suite 855,
Chicago, IL 60606 • (312) 993-1067 • FAX (312) 993-0226

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-01-7367

Mr. Duane Heaton
Deputy Project Officer
Emergency Support Section, 5 HS-12
U.S. Environmental Protection Agency
230 South Dearborn Street
Chicago, IL 60604

September 7, 1990

TAT-05-G2-02055

Re: Schmidt's Brewery Site Assessment, Cleveland, Ohio
TDD# 5-9003-21

Dear Mr. Heaton:

On March 21, 1990, the Technical Assistance Team (TAT) was tasked by the U. S. Environmental Protection Agency (U.S. EPA) to conduct a site assessment at the former Schmidt's Brewery facility in Cleveland, Ohio. A complete review of the site history and analytical results are included in the attached report.

On March 29, 1990, the TAT conducted a site assessment/extent of contamination study and observed large quantities of asbestos containing material (ACM) throughout the facility. Analysis of air samples, collected at a broken window in the brewery, indicated that ACM was being released from the facility and a threat of exposure to the surrounding population was present.

On March 29, 1990, the U.S. EPA instructed the owner's representative to seal the facility to prevent further release of ACM and to begin asbestos abatement. On April 5, 1990, the Cleveland Division of Air Pollution Control (CDAPC) reported to the U. S. EPA that the facility was sealed and asbestos abatement had begun.

Should you have any questions or require additional information, please feel free to contact us.

Very truly yours,

ROY F. WESTON, INC.

Paul A. Malsch
Environmental Scientist

William R. Doyle
Technical Assistance Team
Leader, Region V

PAM:dn
Attachment
cc: S. Renninger, OSC

SITE ASSESSMENT
SCHMIDT'S BREWERY
CLEVELAND, OHIO

Prepared for:

U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois

CONTRACT NO. 68-01-7367

TAT-05-G2-02055

TDD# 5-9003-21

Prepared by:

WESTON-Major Programs
Technical Assistance Team
Region V

September 1990

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1.0 SITE DESCRIPTION

The Schmidt's Brewery site consists of several interconnecting buildings located at 9400 Quincy Ave., Cleveland, Ohio (Figure 1). The topography surrounding the site is flat, and the facility is located in a densely populated residential and commercial sector bordered to the south and east by rapid transit tracks, to the north by residences, and to the west by the Elie Wrecking Company (EWC), Inc. The brewery is currently managed by Stern Enterprises, Inc., 1300 Fulton Building, 107 East Sixth Street, Pittsburgh, Pennsylvania, 15222.

The facility is comprised of a kettle building, two tank buildings, a boiler house, and a canopy area (Figure 2). A tank building and part of the canopy have been partially demolished to facilitate removal of several large stainless steel tanks. The predominant contaminant of concern is asbestos containing material (ACM); this material is located throughout the facility.

2.0 SITE BACKGROUND

The brewery was closed in the late 1980s and is currently being renovated by Stern Enterprises, Inc. Since the closure, the facility has been the subject of continuous unauthorized salvaging of asbestos-covered pipes and fixtures. In most cases the asbestos wrap has been stripped and left in a dry, friable state near its place of origin.

In early August 1989, representatives of the Cleveland Division of Air Pollution Control (CDAPC) observed employees of EWC removing ACM from the facility in preparation to salvage several large stainless steel tanks. Because EWC was not licensed in the State of Ohio to conduct asbestos removal and notification to remove asbestos had not been filed, the CDAPC referred the case to the U.S. Environmental Protection Agency (U.S. EPA) Environmental Services Division (ESD).

On several subsequent investigations conducted by the U.S. EPA large amounts of ACM were observed in the debris from the demolition of the canopy and the tank building (Table 1). Debris stored in the boiler house contained asbestos as well (Table 1). Large quantities of dry, friable material were also observed throughout the kettle building. On August 11, 1989, the U.S. EPA ordered EWC to secure the building and hire a certified contractor to remove all ACM from the demolition zone.

On September 29, 1989, representatives from the U.S. EPA and Ohio Environmental Protection Agency (OEPA) inspected the kettle building and witnessed migration of dry, friable material from the kettle building through broken windows. Subsequent to this investigation, OEPA issued a notice of violation to Stern Enterprises, Inc. because of these emissions and the large amount

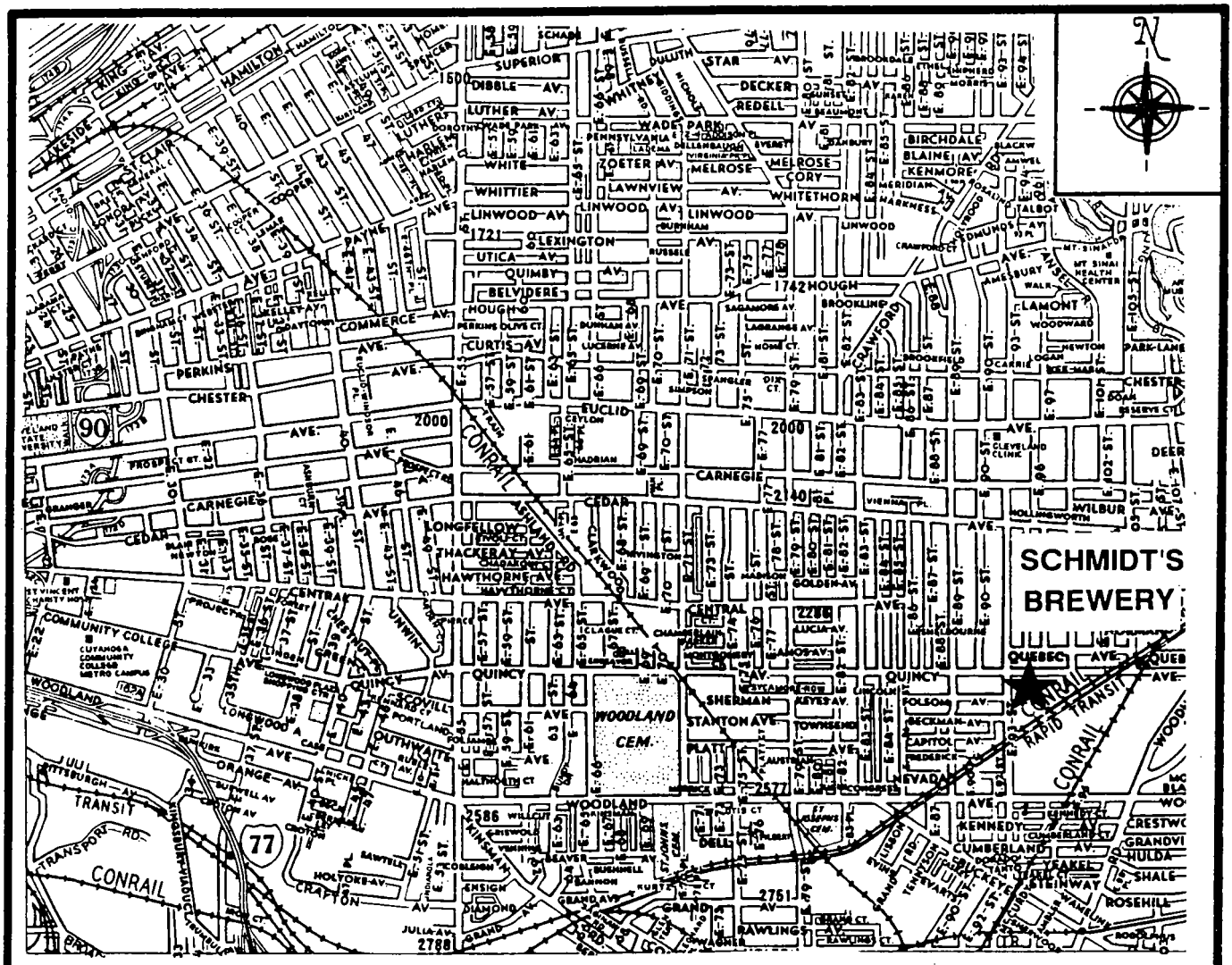


FIGURE 1

SITE LOCATION MAP

SCHMIDT'S BREWERY

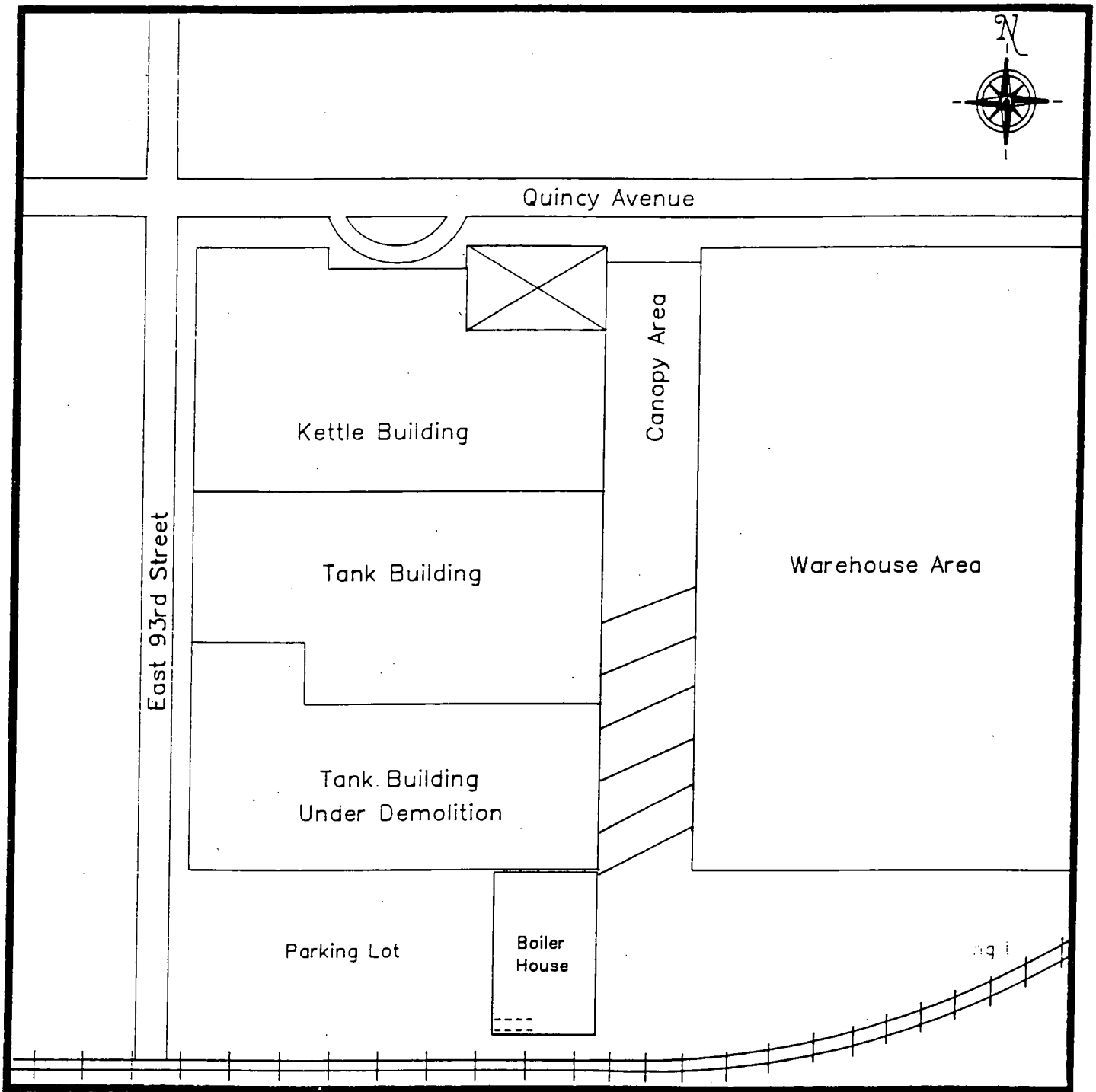
CLEVELAND, OHIO

SOURCE: COMMERCIAL SURVEY CO., CLEVELAND, OHIO

WESTON MANAGERS DESIGNERS/CONSULTANTS — MAJOR PROGRAMS DIVISION

REGION V TECHNICAL ASSISTANCE TEAM

DRAWN BY	DATE	PCS #
P. MALSCH	4-23-90	2664
APPROVED BY	DATE	TDD #
P. MALSCH	4-23-90	5-9002-21



LEGEND

Rapid Transit

Demolished Canopy

Decon Area

ACM Contaminated Area

FIGURE 2

SITE MAP

SCHMIDT'S BREWERY

CLEVELAND, OHIO

NOT TO SCALE

WESTON MANAGERS DESIGNERS/CONSULTANTS

MAJOR PROGRAMS DIVISION

REGION V TECHNICAL ASSISTANCE TEAM

DRAWN BY	DATE	PCS #
P. LENHART	4-23-90	2664
APPROVED BY	DATE	TDD #
P. MALSCH	4-23-90	5-9003-21

TABLE 1

SCHMIDT'S BREWERY
CLEVELAND, OHIO

U.S. EPA SAMPLING RESULTS
August 8-9, 1989

SAMPLE LOCATION	DATE COLLECTED	ASBESTOS TYPE	ASBESTOS (%)
Canopy Debris	8/9/89	Amosite	5-10
Boiler Building	8/9/89	Amosite	5-10
Boiler Building	8/9/89	Amosite Chrysotile	5-10 5-10
Canopy Debris	8/10/89	Amosite	3-5
Boiler Building	8/10/89	Amosite	3-5

of dry, friable material observed throughout the kettle building. The U.S. EPA ESD then referred the site to the U.s. EPA Emergency and Enforcement Response Branch (EERB) for further investigation.

3.0 SITE ASSESSMENT

At the request of the U.S. EPA EERB, Technical Assistance Team (TAT) members Larry Mencin, Paul Malsch, and Katie Mooney and U.S. EPA On-Scene Coordinator (OSC) Steve Renninger conducted an assessment/extent-of-contamination study at the Schmidt's Brewery facility on March 29, 1990. Debris and large quantities of dry, friable material from salvaging were observed throughout the facility, along with evidence of trespassing (Attachment A). Conversations with security personnel confirmed frequent trespassing and unauthorized salvaging.

The fourth floor of the kettle building contained several grain storage bins as well as large amounts of debris and ACM left from the removal of two kettles (Figure 3). In addition, six of the ten north windows, eight of the twelve east windows, and all six of the west windows were broken.

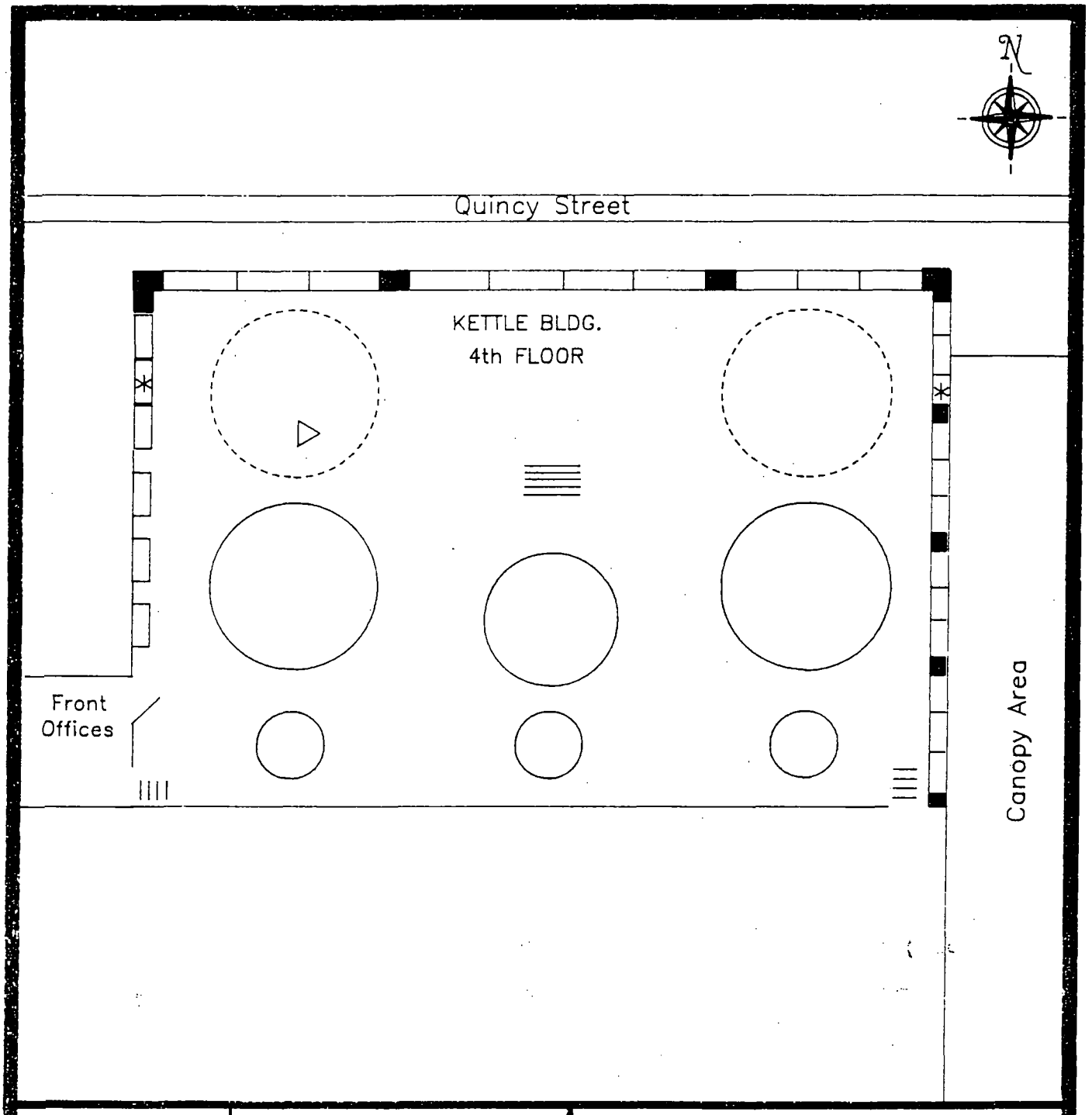
To determine if ACM was migrating from the kettle building, TAT collected air samples from the west and east window ledges of the fourth floor (Figure 3). Using a Gilian HFS 113A air pump, 630 liters of air were pulled through a cellulose filter (pore size = 0.45 um) at a rate of 3.5 liters per minute (l/min.). During the sample period, humidity was high and a steady rain fell. A blank air sample for asbestos was collected and analyzed for quality assurance purposes. In addition, TAT collected a bulk sample of the debris surrounding the salvaged kettles (Figure 3) for asbestos analysis.

The fifth floor of the kettle building also contained large amounts of debris and ACM remaining after the salvage of kettles. TAT collected a composite, bulk sample of the friable material surrounding the salvaged kettles (Figure 4) for asbestos analysis.

The samples were analyzed by ATEC Environmental Consultants under TAT analytical Services TDD# 5-9003-L16.

4.0 ANALYTICAL RESULTS

Table 2 summarizes the air sampling results from the fourth floor of the kettle building. All air samples were analyzed for asbestos by transmission electron microscopy. Analytical results of the west window ledge air sample indicated 0.096 fibers per cubic centimeters (cm^3) of air, and the east window ledge sample result was 0.025 fibers/cm^3. The background air sample was below the method detection limit for asbestos. The National Institute for Occupational Safety and Health (NIOSH) recommended 8-hour, time-weighted average (TWA) for asbestos is 0.1 fibers/cm^3.



LEGEND

- Grain Storage
- Foundation Left From Kettle Salvage
- Window
- Stairs
- Bulk Sample Location
- Air Sample Location

FIGURE 3

SAMPLE LOCATION MAP
(4TH FLOOR)
SCHMIDT'S BREWERY

CLEVELAND, OHIO

NOT TO SCALE

WESTON MANAGERS DESIGNERS/CONSULTANTS
MAJOR PROGRAMS DIVISION

REGION V TECHNICAL ASSISTANCE TEAM

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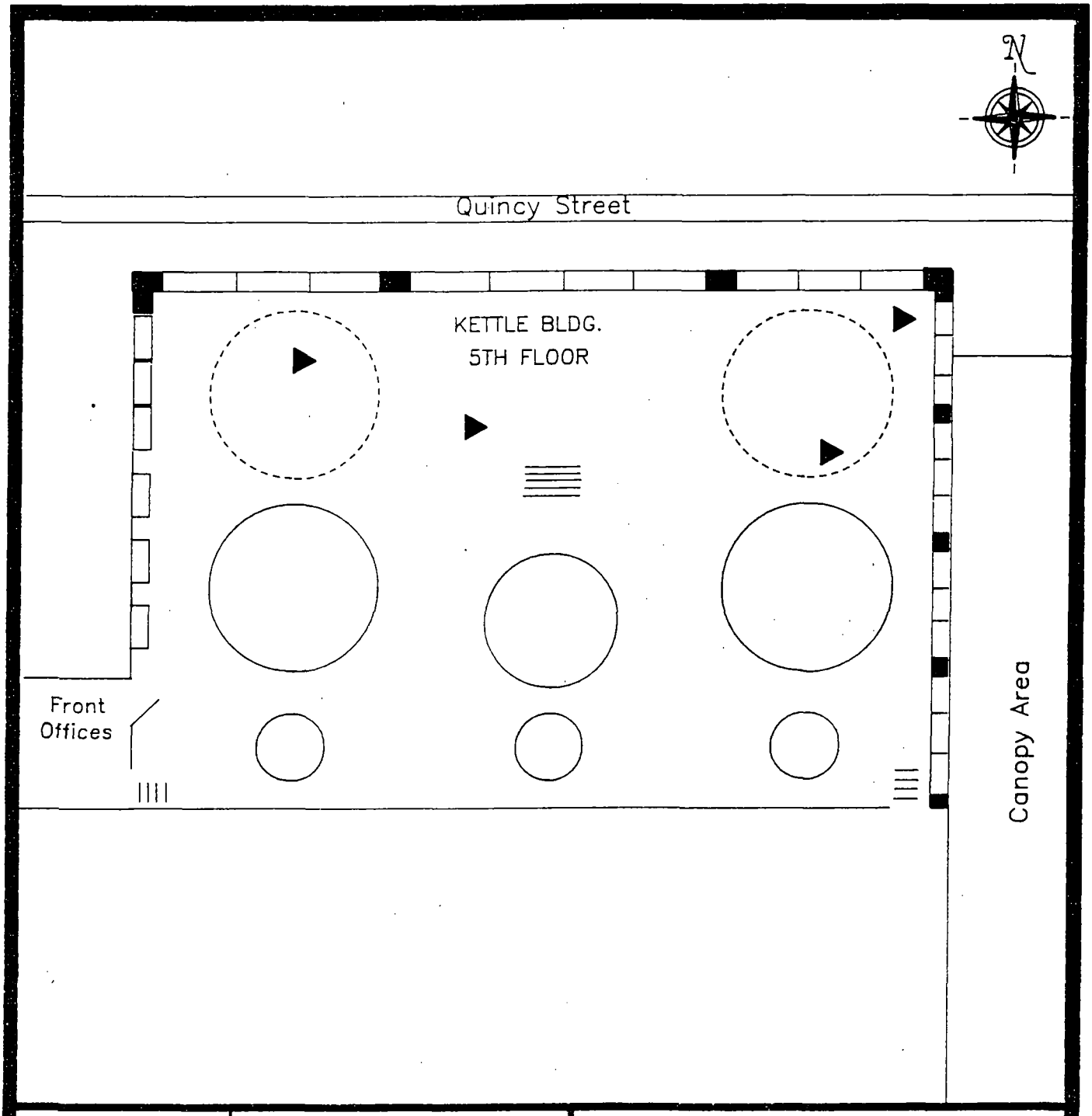

LEGEND

- Grain Storage
- Foundation Left From Kettle Salvage
- Window
- Stairs
- Composite Sample Locations

FIGURE 4

SAMPLE LOCATION MAP
(5TH FLOOR)
SCHMIDT'S BREWERY

CLEVELAND, OHIO

NOT TO SCALE

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MAJOR PROGRAMS DIVISION

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DRAWN BY P. LENHART	DATE 4-12-90	PCS # 2664
APPROVED BY P. MALSCH	DATE 4-12-90	TDD # 5-9003-21

TABLE 2

ANALYTICAL RESULTS OF TAT SAMPLING[a]
AIR SAMPLING FOR ASBESTOS

SCHMIDT'S BREWERY
CLEVELAND, OHIO
MARCH 29, 1990

Sample Location	Date Collected	Fibers/cc
west window ledge 4th floor	3/29/90	0.096
east window ledge 5th floor	3/29/90	0.025
background	3/29/90	ND

[a]Analysis conducted by ATEC Environmental Consultants lab, Indianapolis, Indiana, under TAT Analytical Services TDD#5-9003-L16.

ND = Not detected at method detection limit.

Table 3 summarizes the bulk sampling results from the fourth and fifth floors of the kettle building. All bulk samples were analyzed for asbestos by polarized light microscopy. The fourth floor bulk sample was positive for asbestos at 20 to 30 percent (%) chrysotile and 5 to 15% amosite. The fifth floor bulk sample was positive for asbestos as well at 10 to 20% chrysotile and 20 to 30% amosite.

5.0 ALTERNATIVE ACTIONS

On March 29, 1990, the U.S. EPA and the CDAPC informed the owner's representative that the following remedial actions were necessary:

1. Seal kettle building windows with plywood or plexiglass

2. Wet and cover all ACM

3. Begin ACM removal with a qualified abatement crew

The U.S. EPA Air Compliance branch and the Office of Regional Council (ORC) will check with the owner and the CDAPC to monitor the progress of asbestos abatement for the entire facility.

At OSC Renninger's request, the TAT conducted a drive by of the facility on April 3, 1990. The TAT observed that all but one of the windows visible from the street had been sealed. The TAT spoke with the building manager, who indicated that the remaining window would be sealed and the roof repairs would commence the following day. On April 5, 1990, the CDAPC reported to U.S. EPA that the facility windows were secured in the area of concern, and that asbestos abatement had begun.

TABLE 3

ANALYTICAL RESULTS OF TAT SAMPLING[A]
BULK SAMPLING FOR ASBESTOS

SCHMIDT'S BREWERY
CLEVELAND, OHIO
March 29, 1990

Sample Location	Date Collected	Asbestos	
		% chrysotile	% amosite
4th floor kettle bldg.	3/29/90	20-30	5-15
5th floor kettle bldg.	3/29/90	10-20	20-30

[a] Analysis conducted by ATEC Environmental Consultants Lab, Indianapolis, Indiana, under TAT Analytical Services TDD# 5-9003-L16.

ATTACHMENT A

PHOTOGRAPH LOG

SCHMIDT'S BREWERY
CLEVELAND, OHIO

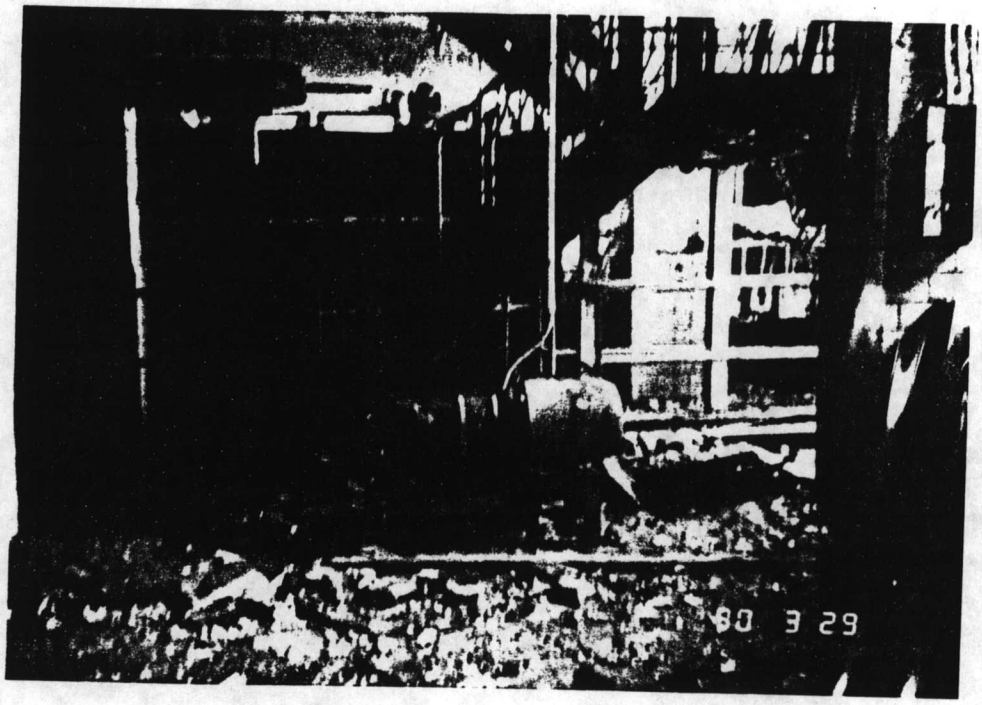

PHOTO:1	PCS# 2664
ROLL/PICTURE:	1/2
SITE NAME:	SCHMIDT'S BREWERY
DESCRIPTION:	1ST FLOOR OF KETTLE BLDG. SHOWING DEBRIS & DRY FRIABLE MATERIAL.
DATE/TIME:	3-29-90 / 1133
PHOTOGRAPHER:	MALSCH
FILM:	35MM, 200 ASA, NO ATTACHMENTS

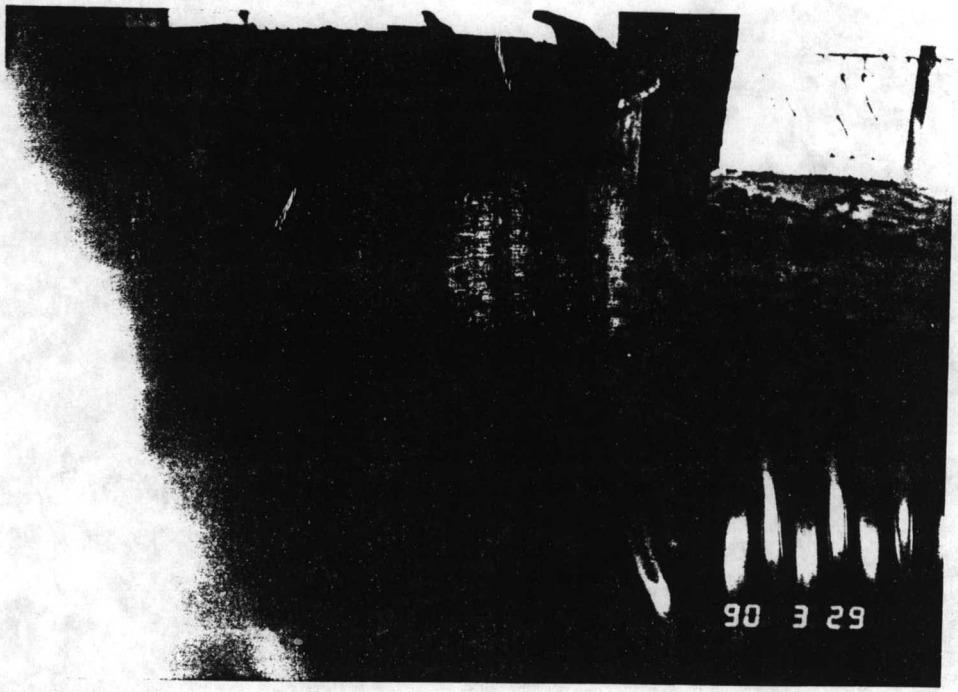

PHOTO:2	PCS# 2664
ROLL/PICTURE:	1/5
SITE NAME:	SCHMIDT'S BREWERY
DESCRIPTION:	3RD FLOOR OF KETTLE BLDG. SHOWING LARGE QUANTITIES OF DRY FRIABLE MATERIAL.
DATE/TIME:	3-29-90 / 1138
PHOTOGRAPHER:	MALSCH
FILM:	35MM, 200 ASA, NO ATTACHMENTS

PHOTO:3 PCS# 2664
ROLL/PICTURE: 1/6
SITE NAME: SCHMIDT'S BREWERY
DESCRIPTION: 4TH FLOOR OF KETTLE BLDG. SHOWING LARGE QUANTITIES OF ACM.
DATE/TIME: 3-29-90 / 1140
PHOTOGRAPHER: MALSCH
FILM: 35MM, 200 ASA, NO ATTACHMENTS

PHOTO:4 PCS# 2664
ROLL/PICTURE: 1/7
SITE NAME: SCHMIDT'S BREWERY
DESCRIPTION: 4TH FLOOR OF KETTLE BLDG. SHOWING LARGE QUANTITIES OF ACM.
DATE/TIME: 3-29-90 / 1142

PHOTO:5	PCS# 2664
ROLL/PICTURE:	1/10
SITE NAME:	SCHMIDT'S BREWERY
DESCRIPTION:	5TH FLOOR OF KETTLE BLDG. SHOWING DEBRIS & ACM LEFT FROM KETTLE SALVAGE.
DATE/TIME:	3-29-90 / 1159
PHOTOGRAPHER:	MALSCH
FILM:	35MM, 200 ASA, NO ATTACHMENTS

PHOTO:6	PCS# 2664
ROLL/PICTURE:	1/11
SITE NAME:	SCHMIDT'S BREWERY
DESCRIPTION:	GILIAN PUMP ON THE WINDOW LEDGE OF THE 4TH FLOOR OF THE KETTLE BLDG.
DATE/TIME:	3-29-90 / 1502
PHOTOGRAPHER:	MENCIN
FILM:	35MM, 200 ASA, NO ATTACHMENTS

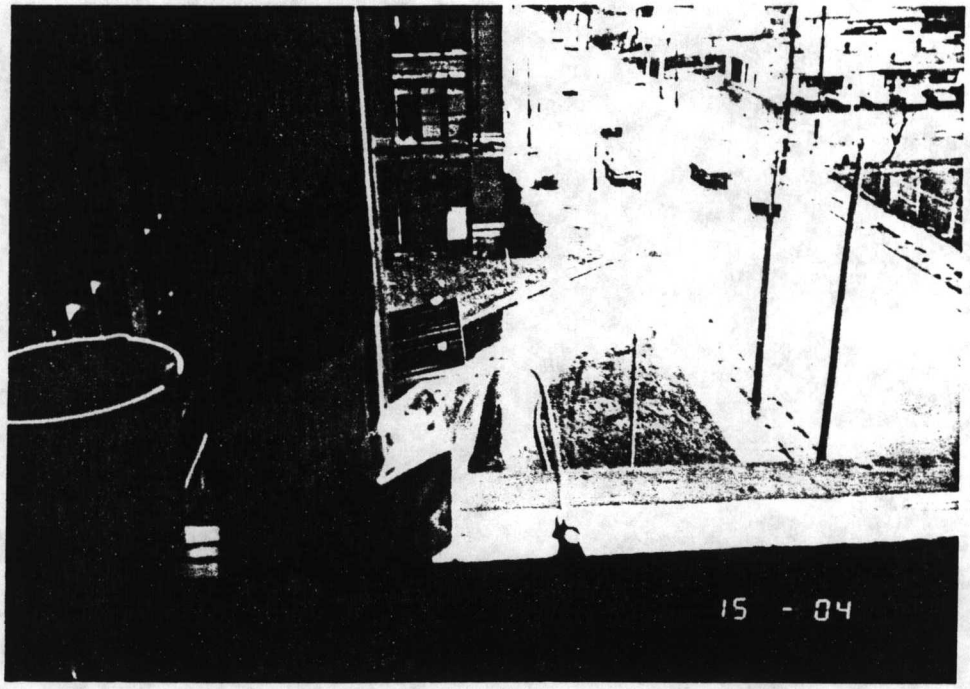

PHOTO:7	PCS# 2664
ROLL/PICTURE:	1/15
SITE NAME:	SCHMIDT'S BREWERY
DESCRIPTION:	VIEW OF RECEPTACLE FROM THE 4TH FLOOR WINDOW OF THE KETTLE BLDG.
DATE/TIME:	3-29-90 / 1504
PHOTOGRAPHER:	MENCIN
FILM:	35MM, 200 ASA, NO ATTACHMENTS

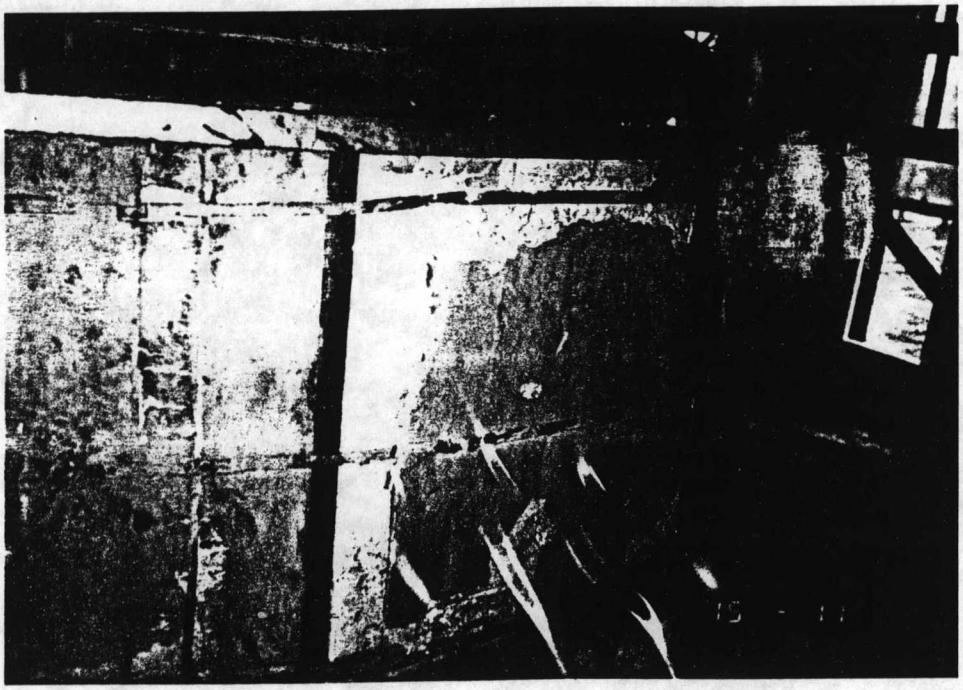

PHOTO:8	PCS# 2664
ROLL/PICTURE:	1/19
SITE NAME:	SCHMIDT'S BREWERY
DESCRIPTION:	VIEW OF KETTLE WITH SUSPECTED ACM INSULATION.
DATE/TIME:	3-29-90 / 1511
PHOTOGRAPHER:	MENCIN
FILM:	35MM, 200 ASA, NO ATTACHMENTS

Appendix C

Telephone Logs - Ohio Environmental Protection Agency

ECOLOGY & ENVIRONMENT INC
6777 ENGLE ROAD SUITE N
CLEVELAND OH 44130-7907

JUSTIN W. BOWERMAN
Originator

PHONE CONVERSATION RECORD

Conversation with:
Name TOM BUCHAN
Company OHIO EPA
Address CENTRAL DISTRICT OFFICE
Phone (800) 426-6515 EXT. 4368

Date 12 / 16 / 97
Time 1400 AM/PM

☐ Originator Placed Call
☒ Originator Received Call
W.O. NO.

Subject SCHMIDT'S BREWERY SITE (MUNICIPAL ~~GROUND~~ WATER SUPPLY).

Notes: TOM BUCHAN RETURNED CALL TO DISCUSS SOURCE OF WATER FOR THE MUNICIPAL WATER SUPPLY THAT PROVIDES WATER TO THE COMMUNITY SURROUNDING THE SCHMIDT'S BREWERY SITE. BUCHAN INFORMS START BOWERMAN THAT THE WATER IS BROUGHT IN FROM OFF-SHORE POINTS, WATER IS TAKEN FROM LAKE ERIE AS THE SUPPLY TO THE MUNICIPAL WATER PLANT.

☒ File
☐ Tickle File ___/___/___
☐ Follow-Up By:
☐ Copy/Route To:

Follow-Up-Action:

Originator's Initials

ECOLOGY & ENVIRONMENT INC
6777 ENGLE ROAD SUITE N
CLEVELAND OH 44130-7907

Justin Bowerman
Originator

PHONE CONVERSATION RECORD

Conversation with:

Name TOM BUCHAN

Company OHIO EPA

Address CENTRAL DISTRICT OFFICE
(614) 644-3020 00518

Phone ~~(800) 426-6515~~ EXT 4368

Subject SCHMIDT'S BREWERY SITE

Date 3 / 16 / 98

Time _____ AM/PM

☐ Originator Placed Call

☒ Originator Received Call

W.O. NO. _____

CLEMOVAL OPERATIONS AT the SCHMIDTS Brewery Site)

Notes: START BOWERMAN SPOKE WITH OEPA TOM BUCHAN TO DISCUSS REMOVAL ACTIONS AT THE SCHMIDTS BREWERY SITE. CLEAN UP CRITERIA AT THE SCHMIDTS BREWERY SITE WAS SET according to THE TOXIC SUBSTANCES CONTROL ACT AND U.S. EPA CLEAN UP CRITERIA. REMOVAL OF THE CONTAMINATED SOIL WAS TO CONTINUE UNTIL LEVELS OF PCBs WERE BELOW 50 mg/kg. CURRENT LEVELS OF PCBs WERE DETECTED AT 490 mg/kg. THREE MONITORING WELLS HAVE BEEN PLACED ON SITE. ANALYSIS OF WATER SAMPLES COLLECTED FROM THE WELLS DID NOT DETECT THE PRESENCE OF PCBs A FOURTH WELL IS TO BE INSTALLED AND ~~DEB~~ FUTURE ACTIONS AT THE SITE WILL BE DEPENDENT ON ANALYTICAL RESULTS FROM THE 4TH WELL, IF PCBs ARE DETECTED IN THE WELL, THEN SOME REMOVAL/REMEDIAL ACTIVITIES MAY BE REQUIRED, IF PCBs ARE NOT DETECTED THEN A RESTRICTION WILL BE PLACED ON THE DEED.

☒ File _____

☐ Tickle File ____ / ____ / ____

☐ Follow-Up By: _____

☐ Copy/Route To: _____

Follow-Up-Action: _____

Originator's Initials JB

ecology and environment, inc., telephone log

Contact	Company or Agency	
Tom Buchan	Ohio Environmental Protection Agency	
Position	**Contact Phone Number**	
	614-644-3020	
E & E Employee	**Date**	**Time**
Jeffrey Hughes	February 5, 1999	0930 hours
Site Name and Location		**Job No./Pan**
Schmidt's Brewery, Cleveland, Cuyahoga County, Ohio		KJ5104/6B132MSIXX

On-site pit has been filled in and only 1 monitoring well left (others removed to regrade).

There is no regular schedule to check the remaining well.

One rolloff box of contaminated soil left on site.

Site is still vacant. Site is fenced, but not locked. No workers are on site.

City of Cleveland still has outstanding issues to resolve with PRP.

Signature/Date

Jeffrey Hughes 2/5/99

Appendix D

Site Assessment Report (April 1997)

SITE ASSESSMENT REPORT
FOR
SCHMIDTS BREWERY
CLEVELAND, CUYAHOGA COUNTY, OHIO
TDD: S05-9702-021
PAN: 7F2101SI
DOCUMENT CONTROL NUMBER: START-05-23-05030

APRIL 24, 1997

Prepared for:
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EMERGENCY RESPONSE BRANCH
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: _____ Date: 04/24/97
Andrew J. Chartrand, START Project Manager

Reviewed and
Approved by: _____ Date: 4.24.97
Anne A. Busher, Assistant START Program Manager

ecology and environment, inc.
6777 ENGLE ROAD, CLEVELAND, OHIO 44130, TEL. (216) 243 3330
International Specialists in the Environment

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1. INTRODUCTION

The United States Environmental Protection Agency (U.S. EPA) tasked the Ecology and Environment, Inc., (E & E) Superfund Technical Assessment and Response Team (START) to assist the U.S. EPA On-Scene Coordinator (OSC) Joseph Fredle in performing a site assessment at the Schmidts Brewery site in Cleveland, Cuyahoga County, Ohio. START was requested under Technical Direction Document S05-9702-021 to prepare and implement a health and safety plan, compile background information, conduct a site assessment, perform air monitoring and sampling, document on-site activities, and evaluate threats to human health and the environment posed by the site. Under direction of the OSC, site assessment activities were conducted on March 18, 1997.

2. SITE BACKGROUND

2.1 SITE DESCRIPTION

The Schmidts Brewery site is located at 9300 Quincy Avenue (at the corner of Quincy Avenue and East 93rd Street), Cleveland, Cuyahoga County, Ohio (Figure 2-1). The geographical coordinates for the site are latitude 41° 29' 33.1" North and longitude 81° 37' 11.1" West.

The majority of the site is covered by concrete and is barren. A large, open pit exists in the northwest corner of the site that is approximately 30 feet deep, 100 feet wide, and 150 feet long. There are two trenches that are approximately 10 feet deep within the pit. One trench is in the northeast corner of the pit and is approximately 20 feet wide and 60 feet long. The second trench is located in the southwest corner of the pit and is approximately 15 feet wide by 20 feet long. Between the two trenches is a large spoil pile that consists of soil and rock that has been removed from the trench in the southwest corner of the pit.

The site is bordered to the west by East 93rd Street. There are residences and vacant lots on the opposite side of East 93rd Street from the site. The site is bordered to the north by Quincy Avenue. On the opposite side of Quincy Avenue from the site there are approximately three residences and some commercial properties and vacant lots. The site is bordered to the south and east by a Penn Central Railroad yard where scrap metal is stored and processed.

The site geology is comprised of made land, sand and gravel, silt and clay, and shale. Much of the site is covered by made land, which is urban cover with 90 percent or more of the surface covered with concrete, asphalt, building complexes, structures, or other manmade surfaces. Sand and gravel deposits in this area are poorly sorted and include shale fragments. The silt and clay in the area of the site ranges in thickness from 4 to 14 feet. The top layer of bedrock in the area of the site is shale and it can be observed at the bottom of the pit. Shale is a sedimentary rock that is highly fractured. The shale

formation exposed at the bottom of the pit is likely Chagrin shale. This type of shale is soft and is medium to greenish gray with irregular interbeds of siltstone and sandstone.

2.2 SITE HISTORY

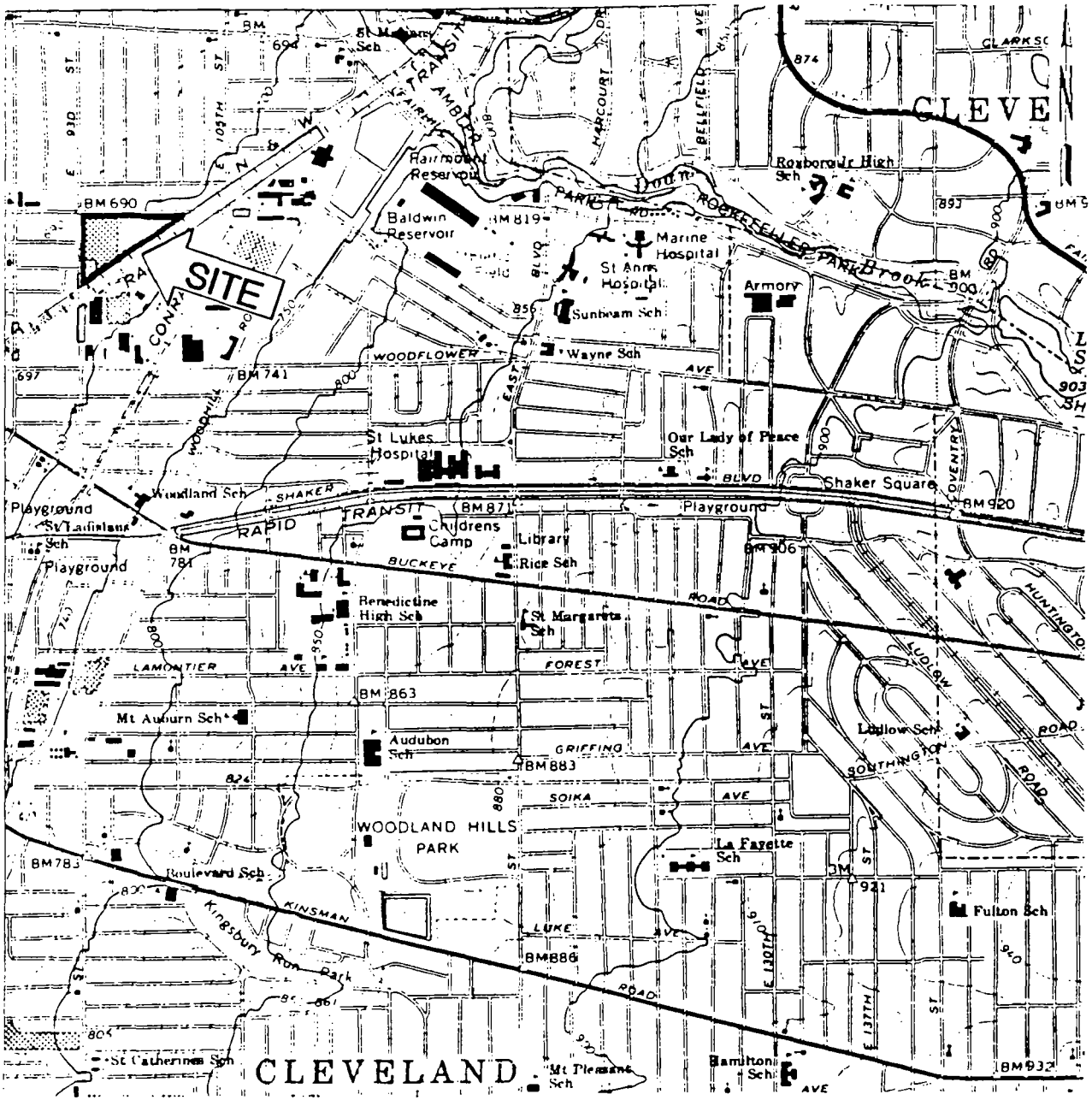
On May 1, 1991, Tom Buchan of the Ohio Environmental Protection Agency (OEPA) conducted an investigation of the Schmidts Brewery site following a complaint of vandalized transformers. An asbestos removal within the site buildings was occurring at the time. Buchan observed two outdoor substations with no transformers and observed three scrapped transformers in the basement of one of the buildings. Buchan also observed flooding in some of the buildings. Wipe samples were collected from the transformers and from visibly oil-stained areas. All results were less than 14 micrograms per square meter (ug/m^2) of polychlorinated biphenyls (PCBs). The estate of Earnest Stern, the former owner, was issued a compliance letter by OEPA.

According to OEPA Buchan, documentation exists that indicates that sampling by Electro Analytical Labs, a contractor to the PRP, began in the basement of Building 12 on October 7, 1993. At that time, it was noted that the PCB transformer had been vandalized and the copper connecting rods had been taken out. Oil samples from the transformer were found to contain 850,000 parts per million (ppm) of PCBs (Aroclor 1260). Water samples from the basement floor were found to contain 900 micrograms per liter (ug/L) of PCBs (Aroclor 1260). Basement sediment samples were found to contain 290,000 ppm of PCBs (Aroclor 1260).

On October 29, 1993, a report was filed with OEPA regarding the vandalized PCB transformer. On November 3, 1993, Buchan of OEPA investigated the spill and discovered a 245-gallon General Electric Pyranol transformer in the basement of Building 12 (Administration Building). According to Buchan, there was three feet of water (approximately 160,000 to 200,000 gallons) in the basement and gauges had been removed from the transformer allowing oil to escape. In addition, Buchan observed 72 large, low voltage capacitors that were old and rusted, and he assumed that they contained PCBs. Five of these capacitors were later determined to be leaking.

The transformer was drained by S.D. Myers, a contractor for the PRP, on December 6, 1993. Three and one-half 55-gallon drums of liquid were removed from the 245-gallon capacity transformer, indicating that at least 52 gallons of PCB transformer oil was likely released. The 72 large PCB capacitors and the PCB transformer were shipped off site for disposal on May 1, 1995. An additional 68 large PCB capacitors were discovered on overhead racks in the basement of Building 12 on April 27, 1995. Although these capacitors were containerized on May 1, 1995, it is not clear as to when they were shipped for disposal.

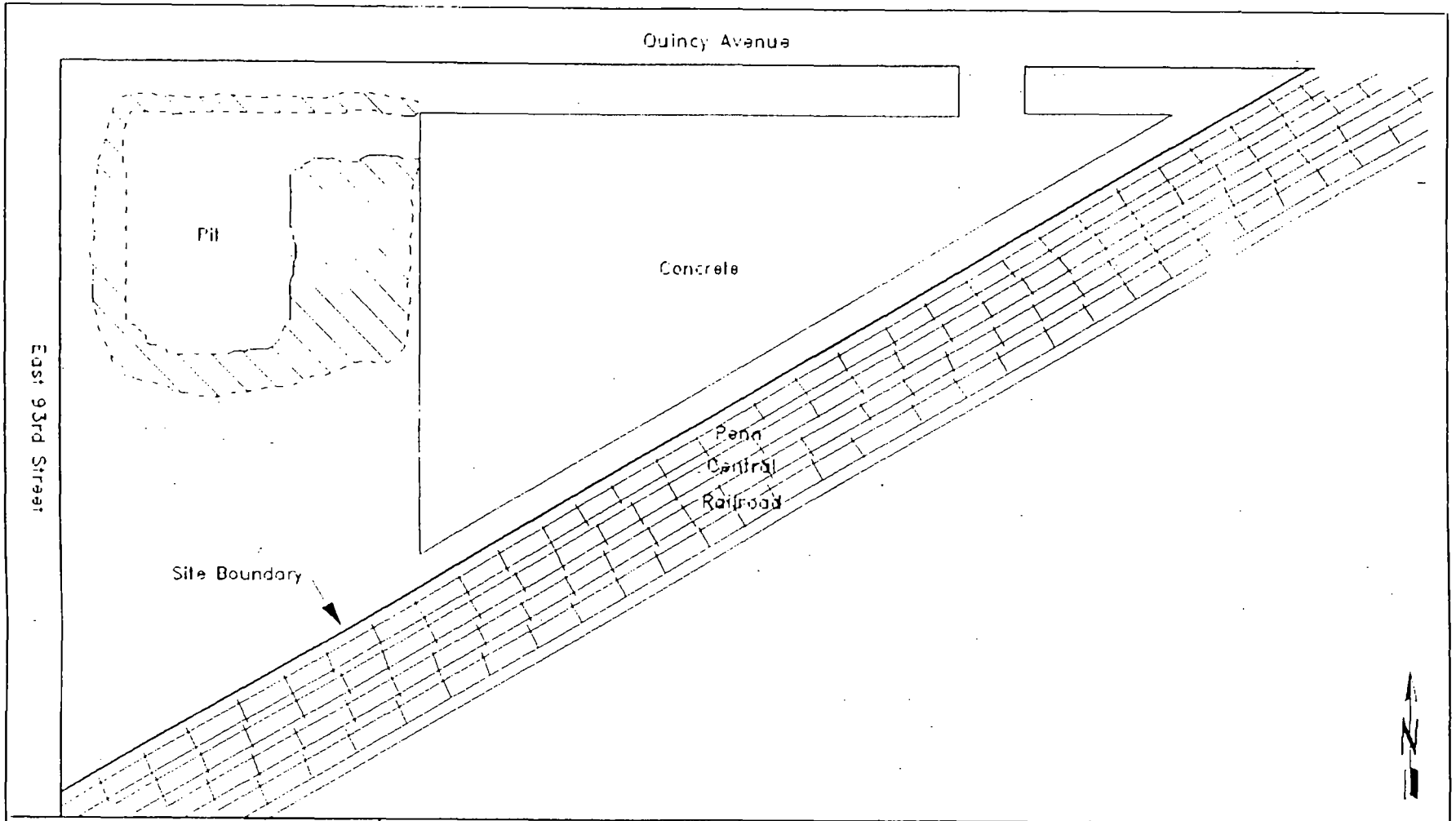
PCB-contaminated debris was placed in roll-off containers by contractors for the PRP. The roll-off containers were stored on the property for almost one year until they were disposed of. The roll-off containers contained liners and were covered with tarps but there were many known incidents of the tarps being torn or stolen. According to OEPA Buchan, the drums of PCB capacitors and other PCB waste were stored on site for greater than 30 days in improper storage areas with no dikes and improper postings. In addition, many of the drums did not have proper labels or dates of storage, as required by state and federal regulations.



Quadrangle Location

ecology and environment, inc.
Superfund Technical Assessment and Response Team
Region V
6777 Engle Rd., Middleburg Hts., Ohio 44130

TITLE Site Location Map	FIGURE 2-1
SITE Schmidts Brewery	SCALE 1:24,000
CITY Cleveland STATE Ohio	PAN 7F2101SI
SOURCE USGS 7.5 Minute Series, Shaker Heights, Ohio	DATE Revised 1979



LEGEND

Chainlink Fence

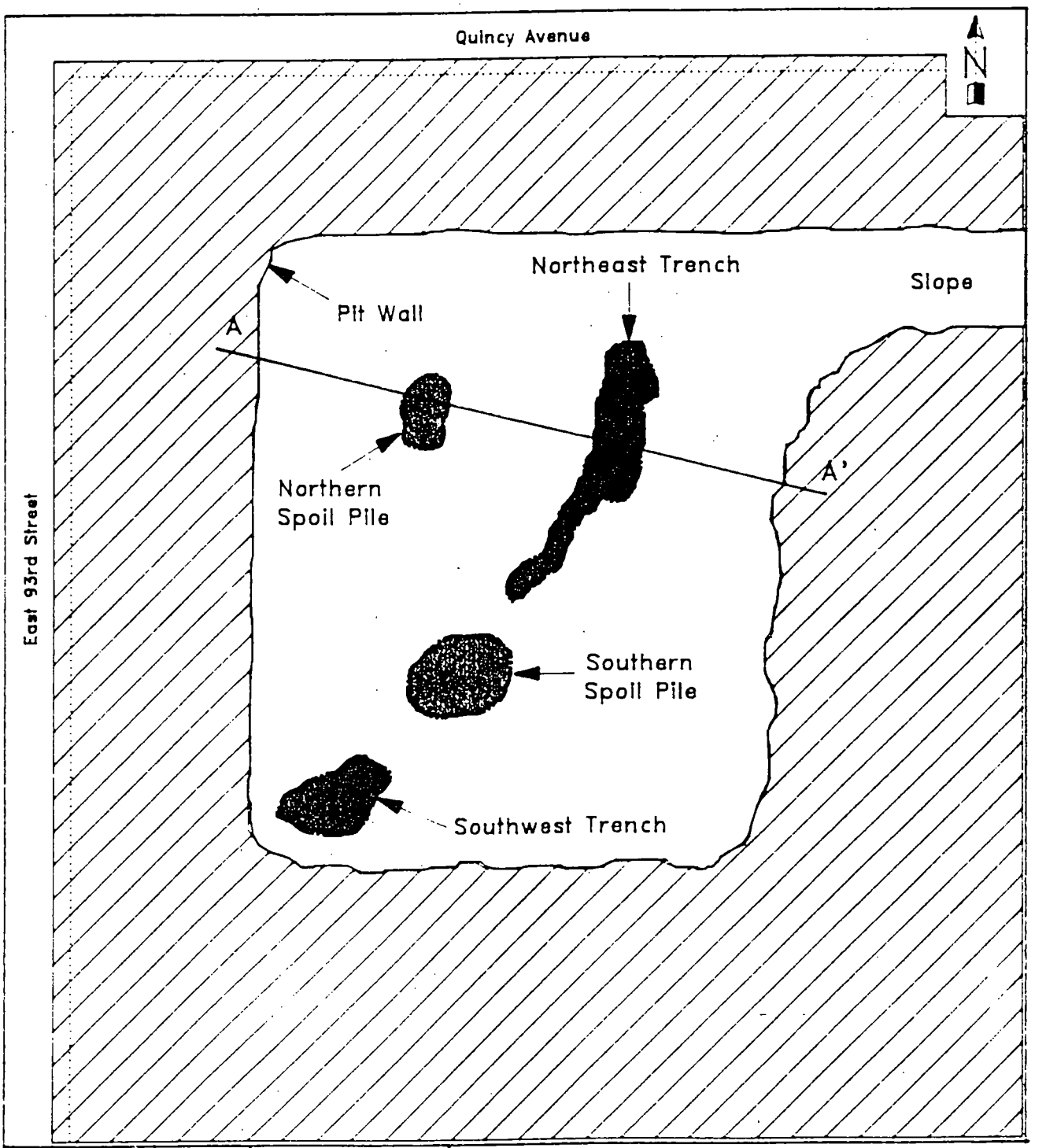
Railroad Tracks

Rubble

Quadrangle Location

ecology and environment, inc.
Superfund Technical Assessment and Response Team
Region V
6777 Engle Rd., Middleburg Hts., Ohio 44130

TITLE Site Features Map	FIGURE 2-2
SITE Schmidts Brewery	SCALE Not Drawn To Scale
CITY Cleveland STATE Ohio	PAN 7F2101SI
SOURCE Ecology and Environment, Inc.	DATE 1997



LEGEND

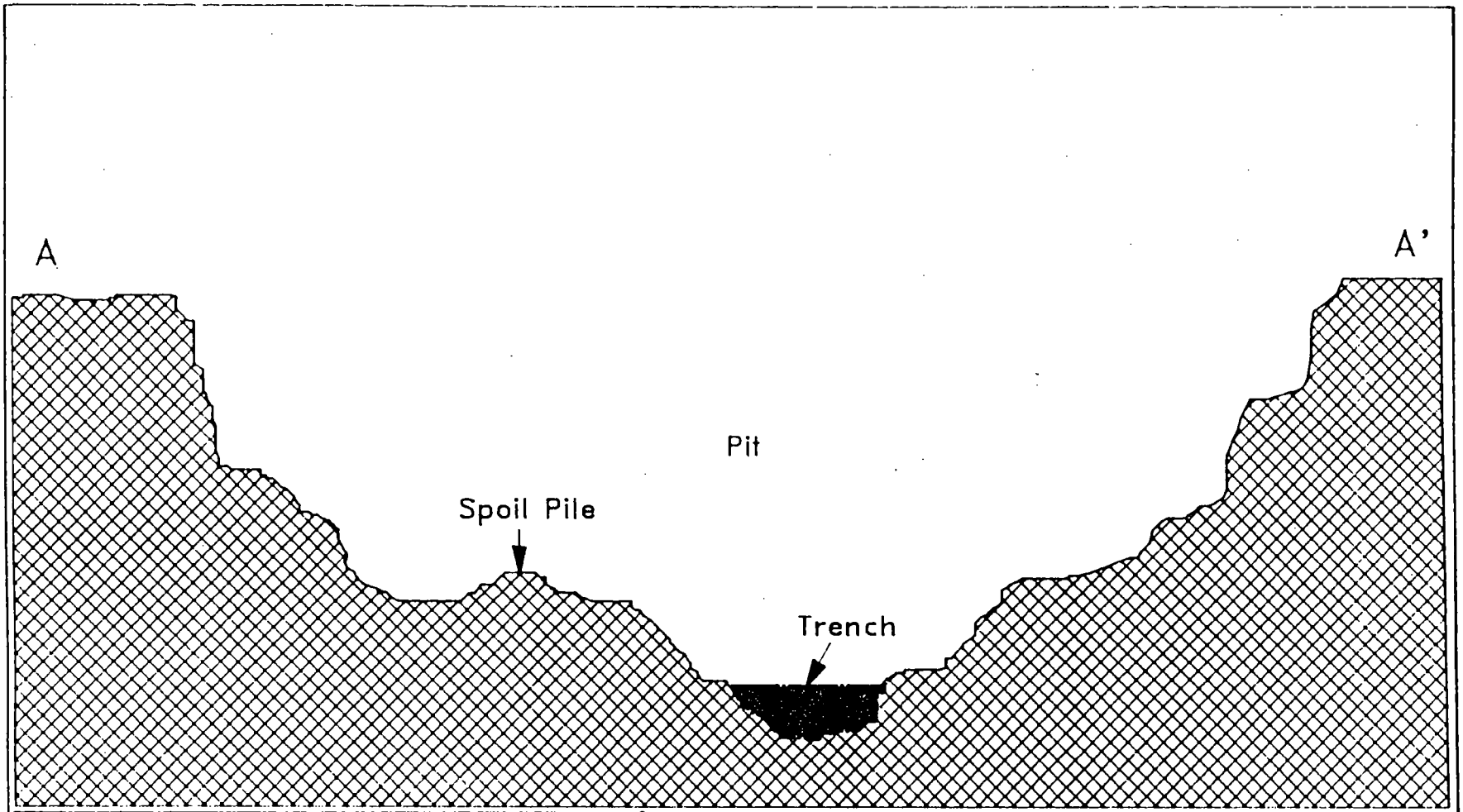
- Fence
- Trench
- Spoil Pile
- Non-Pit Area
- A____A' Cross-Section

OHIO

Quadrangle Location

ecology and environment, inc.
Superfund Technical Assessment and Response Team
Region V
6777 Engle Rd., Middleburg Hts., Ohio 44130

TITLE Pit Features Map	FIGURE 2-3
SITE Schmidts Brewery	SCALE Not Drawn To Scale
CITY Cleveland STATE Ohio	PAN 7F2101SI
SOURCE Ecology and Environment, Inc.	DATE 1997



LEGEND

Soil

Water

ecology and environment, inc.
Superfund Technical Assessment and Response Team
Region V
6777 Engle Rd., Middleburg Hts., Ohio 44130

TITLE Pit Cross-Section Map
FIGURE 2-4
SITE Schmidts Brewery
SCALE Not Drawn To Scale
CITY Cleveland STATE Ohio
PAN 7F2101SI
SOURCE Ecology and Environment, Inc.
DATE 1997

3. SITE ACTIVITIES

3.1 SITE RECONNAISSANCE

On March 18, 1997, START Members (STARTMs) Andrew Chartrand and Anne Busher, OSC Fredle, OEPA representative Buchan, and U.S. representatives Mike Patton, John Giercziak, and Kendall Moore met at the Schmidts Brewery site to complete site assessment and sampling activities. Two representatives from the PRP's prime contractor, McLaren-Hart Environmental Engineering Corporation (McLaren-Hart), were also on site. U.S. EPA and START personnel completed a reconnaissance of the site and the pit excavation. START personnel conducted air monitoring activities during the site reconnaissance with a photoionization detector (PID), a radiation meter, an oxygen meter, and a combustible gas indicator. Readings above background levels were not detected in the breathing zone within the excavation, allowing for the continuation of work activities in modified level D protection.

3.2 SITE OBSERVATIONS

On March 18, 1997, STARTMs Chartrand and Busher arrived at the Schmidts Brewery site and found the gate in the northeast corner of the site unsecured. An approximately 8-foot high fence surrounds the site and was observed to be intact. The majority of the site is covered by concrete and is barren. No buildings or other structures exist on site.

A large, open pit exists in the northwest corner of the site that is approximately 30 feet deep, 100 feet wide, and 150 feet long. The pit has been dug down below the basements of former buildings and into areas of the underlying shale. Surrounding the perimeter of the pit is a large amount of rubble that exists from the past destruction of site buildings. There are two trenches that are approximately 10 feet deep within the pit. One trench is in the northeast corner of the pit and is approximately 20 feet wide and 60 feet long. The second trench is located in the southwest corner of the pit and is approximately 15 feet wide and 20 feet long. Between the two trenches is a large spoil pile that consists of soil

and rock that has been removed from the trench in the southwest corner of the pit. Six roll-off boxes with PCB contaminated debris exist around the perimeter of the pit.

The site is located in a low income, minority populated residential and industrial area. The site is bordered to the west by East 93rd Street. There are residences and vacant lots on the opposite side of East 93rd Street from the site. The site is bordered to the north by Quincy Avenue. On the opposite side of Quincy Avenue from the site there are approximately three residences and some commercial properties and vacant lots. The site is bordered to the south and east by a Penn Central Railroad yard where scrap metal is stored and processed.

3.3 SAMPLING ACTIVITIES

After completion of the initial site reconnaissance, START and OSC Fredle discussed their observations and the proposed sampling scheme. OSC Fredle and START formulated a sampling plan and selected 11 locations for the collection of soil samples and two locations for the collection of water samples. Water samples were collected prior to the collection of soil samples. START collected split samples of only the soils at each location for the PRP representatives from McLaren-Hart.

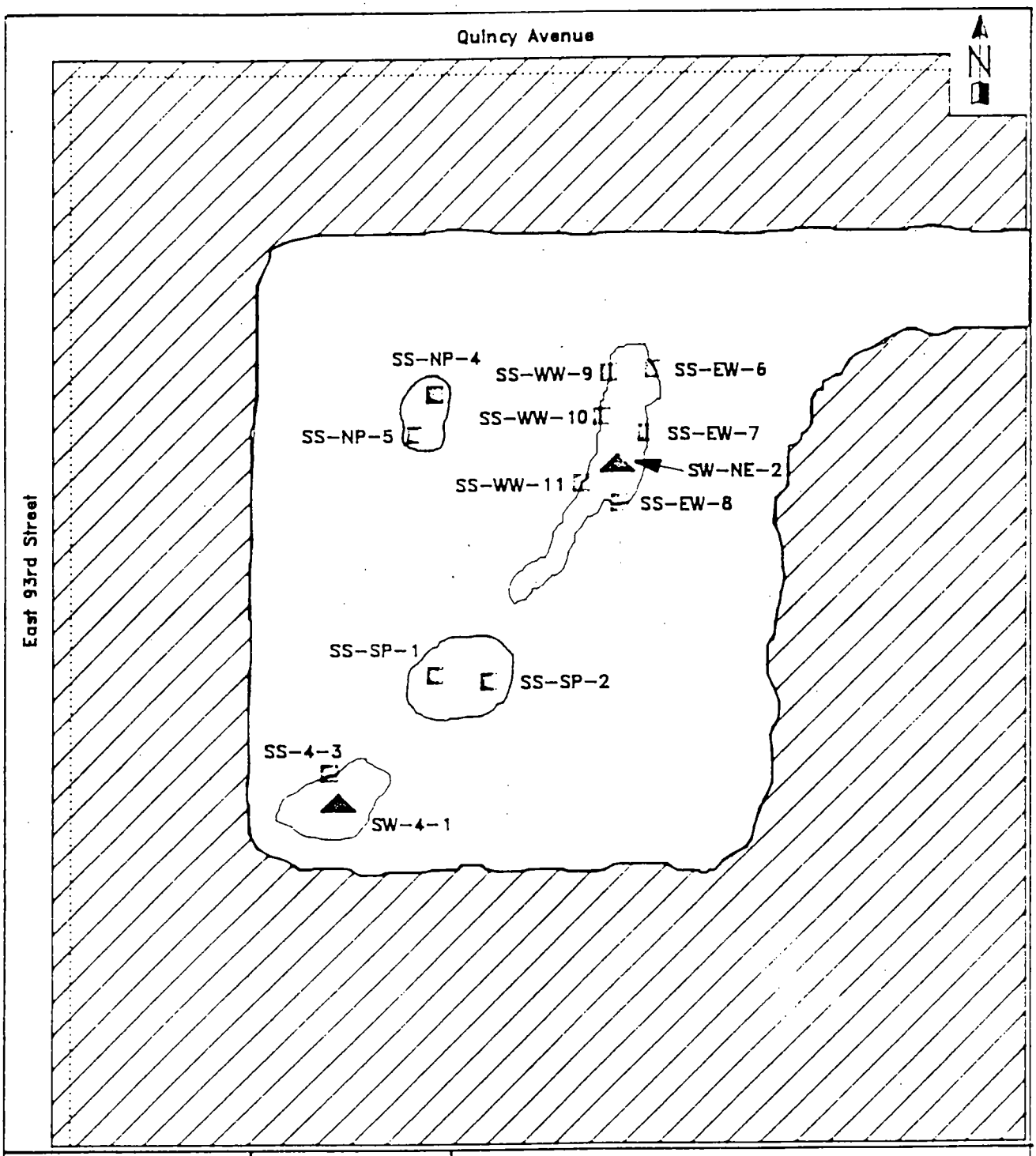
Water sample SW-4-1 was collected from the southwestern trench and water sample SW-NE-2 was collected from the northeastern trench. Surface water samples were collected by skimming the sheen on the water surface with a dedicated sample jar and pouring the contents into the 4-liter sample bottle.

A total of eleven soil samples were collected from the site. Samples SS-SP-1 and SS-SP-2 were collected from the spoil pile that exists between the two trenches. Sample SS-4-3 was collected from the walls of the southwestern trench. Samples SS-NP-4 and SS-NP-5 were collected from the spoil pile to the west of the northeastern trench. Six samples were collected from the northeastern trench. Prior to the collection of the samples from the northeastern trench, the groundwater within the trench was pumped into a holding tank on site. The samples within this trench were collected before the groundwater could fully recharge the northeastern trench. Samples SS-EW-6, SS-EW-7, and SS-EW-8 were collected from the eastern wall of the northeastern trench. Samples SS-WW-9, SS-WW-10, and SS-WW-11 were collected from the western wall of the northeastern trench. Samples SS-EW-6 and SS-WW-9 were collected from the northern end of the trench. Samples SS-EW-7 and SS-WW-10 were collected from the center of the trench. Samples SS-EW-8 and SS-WW-11 were collected from the southern end of the trench.

All sampling activities were conducted in modified level D protection, with polytyveks, coveralls, latex boot covers, and butyl gloves. Monitoring was performed in the breathing zone with a PID during sampling activities. Soil samples were collected with dedicated plastic and stainless steel trowels and spoons. Outer sampling gloves were changed between each sampling point. No readings above background levels in the breathing zone were detected on the PID during sampling activities.

Upon completion of the sampling activities, the samples were decontaminated, labeled, and packaged according to standard E & E protocols. START personnel conducted dry decontamination activities and all potentially contaminated personal protective clothing was bagged and left on site, as directed by the OSC. All nonexpendable equipment and supplies were cleaned with specially treated rags to wipe off any potential contamination. All personnel departed site for the day at 1520 hours.

On March 19, 1997, STARTM Chartrand delivered the samples to BEC Laboratories, Inc., in Toledo, Ohio, for analysis of PCBs.



LEGEND

- Fence
- Soil Sample
- Water Sample
- Non-Pit Area

Quadrangle Location

ecology and environment, inc.
Superfund Technical Assessment and Response Team
Region V
6777 Engle Rd., Middleburg Hts., Ohio 44130

TITLE Sample Location Map	FIGURE 3-1
SITE Schmidts Brewery	SCALE Not Drawn To Scale
CITY Cleveland STATE Ohio	PAN 7F2101SI
SOURCE Ecology and Environment, Inc.	DATE 1997

4. ANALYTICAL RESULTS

PCB analysis was performed by BEC Laboratories, Inc., by U.S. EPA Method 8080. PCB results are summarized in Table 4-1 and are included in Appendix B.

Aroclor 1260 was the only PCB detected in the samples. Aroclor 1260 was detected in the surface water samples collected from the southwestern trench at 1010 micrograms per liter (ug/L) (SW-4-1) and in the northeastern trench at 200 ug/L (SW-NE-2). Aroclor 1260 was detected in the soil from the walls of the southwestern trench at 1.7 milligrams per kilogram (mg/Kg) (SS-4-3). The two soil samples from the southern spoil pile contained 0.17 mg/Kg (SS-SP-1) and less than 0.1 mg/Kg (SS-SP-2) of Aroclor 1260, respectively. The two soil samples from the northern spoil pile contained 122 mg/Kg (SS-NP-4) and 146 mg/Kg (SS-NP-5) of Aroclor 1260, respectively. The three soil samples from the eastern wall of the northeastern trench contained 700 mg/Kg (SS-EW-6), 90 mg/Kg (SS-EW-7), and 94 mg/Kg (SS-EW-8) of Aroclor 1260, respectively. The three soil samples from the western wall of the northeastern trench contained 74 mg/Kg (SS-WW-9), 84 mg/Kg (SS-WW-10), and 260 mg/Kg (SS-WW-11) of Aroclor 1260, respectively.

Table 4-1

START PCB ANALYTICAL RESULTS[a] FOR
THE SCHMIDTS BREWERY SITE
CLEVELAND, CUYAHOGA COUNTY, OHIO
MARCH 18, 1997

SAMPLE	LOCATION	MATRIX	AROCLOR 1260[b]
SW-4-1	Southwest trench	Water	1010 ug/L
SW-NE-2	Northeast trench	Water	200 ug/L
SS-SP-1	Southern spoil pile	Soil	0.17 mg/Kg
SS-SP-2	Southern spoil pile	Soil	< 0.1 mg/Kg
SS-4-3	Southwest trench	Soil	1.7 mg/Kg
SS-NP-4	Northern spoil pile	Soil	122 mg/Kg
SS-NP-5	Northern spoil pile	Soil	146 mg/Kg
SS-EW-6	Eastern side of northeast trench	Soil	700 mg/Kg
SS-EW-7	Eastern side of northeast trench	Soil	90 mg/Kg
SS-EW-8	Eastern side of northeast trench	Soil	94 mg/Kg
SS-WW-9	Western side of northeast trench	Soil	74 mg/Kg
SS-WW-10	Western side of northeast trench	Soil	84 mg/Kg
SS-WW-11	Western side of northeast trench	Soil	260 mg/Kg

Key:
[a] = samples analyzed under TDD S05-9702-021 by BEC Laboratories, Inc., Toledo, Ohio.
[b] = Aroclor 1260 was the only PCB detected in all samples.
ug/L = micrograms per liter.
mg/Kg = milligrams per kilogram.

5. DISCUSSION OF POTENTIAL THREATS

Paragraph (b) (2) of Part 300.415 of the National Contingency Plan (NCP) lists factors to be considered when determining the appropriateness of a potential removal action at a site. The following discussion presents a summary of the factors that are applicable to the Schmidts Brewery site.

- **Actual or potential exposure of nearby human populations, animals, or the food chain to hazardous substances or pollutants or contaminants.** The presence of PCBs was documented in site soils at concentrations greater than 50 ppm. As stated in 40 CFR Subpart B 761.20: "... PCB concentrations of 50 ppm or greater present an unreasonable risk of injury to health within the United States" and "... any exposure of human beings or the environment to PCBs, as measured or detected by any scientifically acceptable analytical method, may be significant, depending upon such factors as the quantity of PCBs involved in the exposure to humans and the environment, and the effect of exposure."

  The potential for exposure to PCBs by surrounding populations and the environment is high. Evidence of trespassing and vandalism has been noted in the past. In addition, the underlying shale may allow further migration of PCBs.

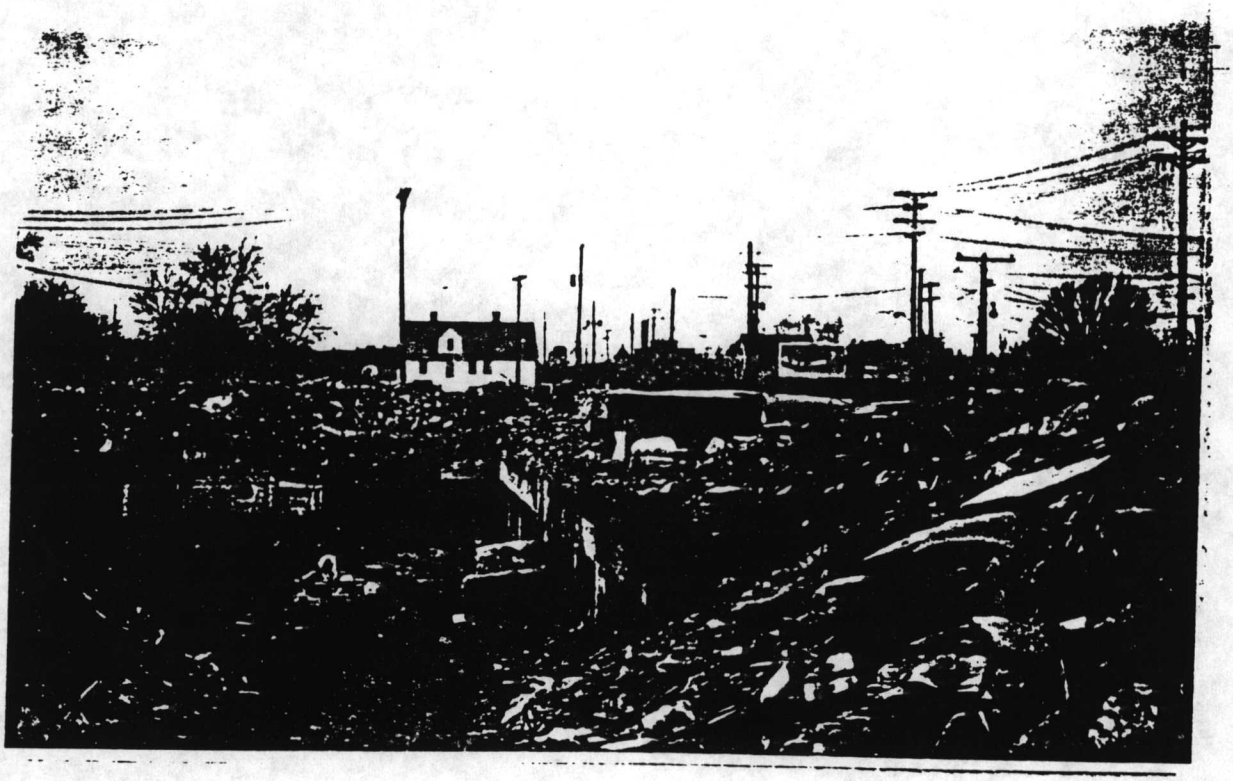
- **Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.** There are six roll-off boxes on site that contain some PCB-contaminated wastes. Vandalism has been documented at the site in the past.

- **High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate.** Analysis of soil samples from within the pit revealed that PCB contamination (Aroclor 1260) was detected at concentrations greater than 50 mg/Kg in 8 of the 11 soil samples collected by START as part of this investigation. The highest detected concentration of Aroclor 1260 in site soils was 700 mg/Kg. The site is underlain by shale and PCB contamination is known to have migrated through the shale.

- **Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.** Northeast Ohio receives substantial rainfall during the spring and fall seasons. The pit is open to the environment and precipitation may increase the migration and the release of PCBs to the surrounding soil and water.

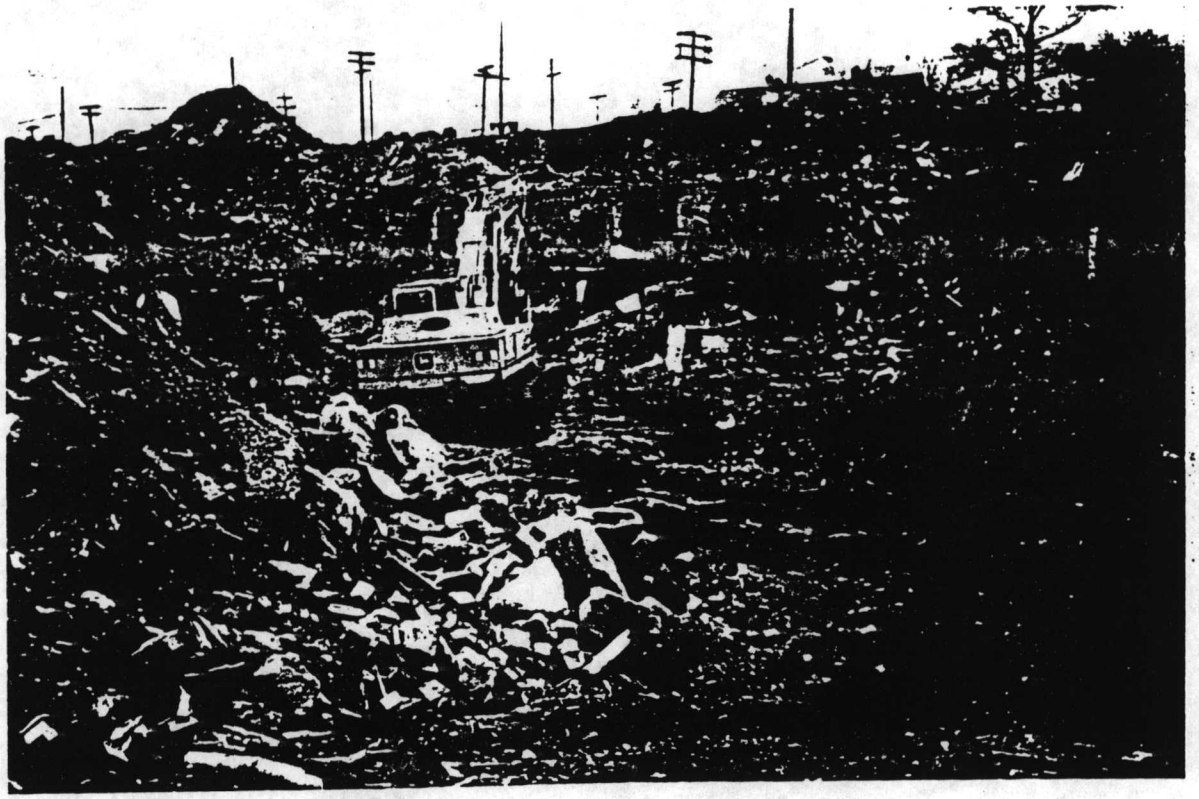
APPENDIX A

SITE PHOTOGRAPHS



SITE: Schmidts Brewery **TDD:** S05-9702-021 **PAN:** 7F2101SI **PHOTO:** 1
DIRECTION: West **DATE:** 03/18/97 **PHOTOGRAPHER:** Chartrand
DESCRIPTION: Looking into the large pit at the site. The white house in the background is approximately 200 feet from the pit.

SITE: Schmidts Brewery **TDD:** S05-9702-021 **PAN:** 7F2101SI **PHOTO:** 2
DIRECTION: Southeast **DATE:** 03/18/97 **PHOTOGRAPHER:** Chartrand
DESCRIPTION: From east of the pit, looking across the site at the railroad tracks that border the site to the south.



SITE: Schmidts Brewery **TDD:** S05-9702-021 **PAN:** 7F2101SI **PHOTO:** 7
DIRECTION: Southwest **DATE:** 03/18/97 **PHOTOGRAPHER:** Chartrand
DESCRIPTION: Looking at the southern section of the pit from the slope leading into the pit.

SITE: Schmidts Brewery **TDD:** S05-9702-021 **PAN:** 7F2101SI **PHOTO:** 8
DIRECTION: Southwest **DATE:** 03/18/97 **PHOTOGRAPHER:** Chartrand
DESCRIPTION: The trench dug into the shale in the southwest corner of the pit.

SITE: Schmidts Brewery **TDD:** S05-9702-021 **PAN:** 7F2101SI **PHOTO:** 9
DIRECTION: Northeast **DATE:** 03/18/97 **PHOTOGRAPHER:** Chartrand
DESCRIPTION: The trench dug in the northeast corner of the pit.

SITE: Schmidts Brewery **TDD:** S05-9702-021 **PAN:** 7F2101SI **PHOTO:** 10
DIRECTION: Southwest **DATE:** 03/18/97 **PHOTOGRAPHER:** Patton
DESCRIPTION: START members Busher and Chartrand collecting a water sample in the southwest trench.

SITE: Schmidts Brewery **TDD:** S05-9702-021 **PAN:** 7F2101SI **PHOTO:** 11
DIRECTION: Southwest **DATE:** 03/18/97 **PHOTOGRAPHER:** Patton
DESCRIPTION: START member Chartrand collecting a soil sample from the southwest trench.

SITE: Schmidts Brewery **TDD:** S05-9702-021 **PAN:** 7F2101SI **PHOTO:** 12
DIRECTION: West **DATE:** 03/18/97 **PHOTOGRAPHER:** Patton
DESCRIPTION: START member Busher collecting a soil sample from the southern spoil pile.

APPENDIX B

ANALYTICAL DATA PACKAGE

ecology and environment, inc.
12251 UNIVERSAL, TAYLOR, MICHIGAN 48180, TEL. (313) 946-0900
International Specialists in the Environment

MEMORANDUM

DATE: April 3, 1997

TO: Andrew J. Chartrand, START Project Manager, E & E, Cleveland, Ohio

FROM: Brigid T. Brooks, START Chemical Engineer, E & E, Taylor, Michigan

THROUGH: Michael L. Dieckhaus, START Assistant Program Manager, E & E, Taylor, Michigan
David Hendren, START Quality Assurance Officer, E & E, Chicago, Illinois

SUBJECT: Polychlorinated Biphenyl (PCB) Data Quality Assurance Review, Schmidts Brewery, Cleveland, Cuyahoga County, Ohio

REFERENCE: Project TDD: S05-9702-021 Analytical TDD: S05-9702-810
Project PAN: 7F2101SIXX Analytical PAN: 7FAJ01TAXX

The data quality assurance (QA) review of two water and 11 soil samples, collected from the Schmidts Brewery site, is complete. Samples were collected on March 18, 1997, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). Samples were submitted to BEC Laboratories, Inc., Toledo, Ohio, for analyses of PCBs. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste-846 (SW-846) Method 8080 for the determination of PCB concentrations.

Sample Identification

START Identification No.	Laboratory Identification No.
SW-4-1	97T02731
SW-NE-2	97T02732
SS-SP-1	97T02733
SS-SP-2	97T02734
SS-4-3	97T02735
SS-NP-4	97T02736
SS-NP-5	97T02737
SS-EW-6	97T02738
SS-EW-7	97T02739
SS-EW-8	97T02740
SS-WW-9	97T02741
SS-WW-10	97T02742
SS-WW-11	97T02743

Data Qualifications

I. Holding Time: Acceptable

Samples were collected on March 18, 1997, and received by the laboratory on March 19, 1997. The samples were analyzed on March 20, 21, and 24, 1997. All analyses were completed within the 14 days from collection to extraction and 40 days from extraction to analyses holding time specified in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01.

II. Instrument Performance: Acceptable

All raw chromatograms were reviewed for adequate peak resolution, and all had adequate resolution between peaks of each Aroclor standard. The retention time windows for the sample and check calibration standards were reported and compared to the standard chromatograms for agreement.

III. Calibration:

A. Initial Calibration: Acceptable

Calibrations were performed for all Aroclors, and all percent relative standard deviations (%RSDs) for these Aroclors were less than or equal to 10%.

B. Continuing Calibration: Acceptable

Continuing calibration was performed for reported Aroclors, and percent differences (%Ds) for all the Aroclors were less than or equal to 15%.

IV. Method Blank: Acceptable

Method blanks were analyzed on each day in the proper sequence, and all target compounds were below the instrument detection limits.

V. Compound Identification: Acceptable

Sample chromatograms were compared with standard chromatograms, and Aroclors that were quantified by the laboratory appeared to have the associated fingerprint patterns for the reported Aroclors.

VI. Compound Quantitation and Reported Detection Limits: Acceptable

All reported detection limits have been correctly adjusted to reflect dilutions.

VII. Overall Assessment of Data: Acceptable

The overall usefulness of the data is based on the criteria outlined in OSWER Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 7.0, PCBs, and Section 2.7, Quality Assurance Requirements. Based upon the information provided, the data are acceptable for use.

logy & Environment, Inc.
51 Universal

r, MI 48180
N: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02731

p.o. no.

rev: 0

MPLE
SCRIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SW-4-1 - Station Location : Surface Water From Southwest Corner - Sample Date 03/18/97 @ 12:15 - Grab

ALYSIS: PCBs

OCEDURE: SW-846, Method 8080

ESULT:

Compound	Results
Aroclor 1016	< 40 µg/L
Aroclor 1221	< 40 µg/L
Aroclor 1232	< 40 µg/L
Aroclor 1242	< 40 µg/L
Aroclor 1248	< 40 µg/L
Aroclor 1254	< 40 µg/L
Aroclor 1260	1010 µg/L

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	101%	30%-134%
Decachlorobiphenyl	146%	30%-125%

Elevated PQL due to dilution necessary to bring sample Aroclor concentration within the range of the calibration curve.

DCB is above acceptable limits, however, the method requirement of one surrogate being in control has been met, therefore, no corrective action is necessary.

completed
3/24/97

tech
PDB

approved by

ology & Environment, Inc.
251 Universal

Arbor, MI 48180
ATTN: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02732

p.o. no.

rev: 0

SAMPLE DESCRIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SW-NE-2 - Station Location : Surface Water From Northeast Corner - Sample Date 03/18/97 @ 12:20 - Grab

ANALYSIS: PCBs

PROCEDURE: SW-846, Method 8080

RESULT:

Compound	Results
Aroclor 1016	< 40 µg/L
Aroclor 1221	< 40 µg/L
Aroclor 1232	< 40 µg/L
Aroclor 1242	< 40 µg/L
Aroclor 1248	< 40 µg/L
Aroclor 1254	< 40 µg/L
Aroclor 1260	200 µg/L

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	97%	33%-112%
Decachlorobiphenyl	143%	16%-125%

Elevated PQL due to dilution necessary to bring sample Aroclor concentration within the range of the calibration curve.

DCB is above acceptable limits, however, the method requirement of one surrogate being in control has been met, therefore, no corrective action is necessary.

date completed: 3/24/97

tech: PDB

approved by

logy & Environment, Inc.
51 Universal

lor, MI 48180
N: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02733

p.o no.

rev: 0

MPLE
RIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SS-SP-1 - Station Location : Soil From Southern Spoil Pile - Sample Date 03/18/97 @ 12:30 - Grab

YSIS: PCBs

EDURE: SW-846, Method 8080

LT:

Compound	Results
Aroclor 1016	< 0.1 mg/Kg
Aroclor 1221	< 0.1 mg/Kg
Aroclor 1232	< 0.1 mg/Kg
Aroclor 1242	< 0.1 mg/Kg
Aroclor 1248	< 0.1 mg/Kg
Aroclor 1254	< 0.1 mg/Kg
Aroclor 1260	0.17 mg/Kg

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	93%	30%-134%
Decachlorobiphenyl	92%	30%-125%

completed: 3/21/97

tech: PDB

approved by:

[redacted]ogy & Environment, Inc.
[redacted]51 Universal

[redacted]or, MI 48180
[redacted]N: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02734

p.o. no.

rev: 0

[redacted]MPLE
[redacted]CRIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SS-SP-2 - Station Location : Soil From Southern Spoil Pile - Sample Date 03/18/97 @ 12:35 - Grab

[redacted]LYSIS: PCBs

[redacted]CEDURE: SW-846, Method 8080

[redacted]ULT:

Compound	Results
Aroclor 1016	< 0.1 mg/Kg
Aroclor 1221	< 0.1 mg/Kg
Aroclor 1232	< 0.1 mg/Kg
Aroclor 1242	< 0.1 mg/Kg
Aroclor 1248	< 0.1 mg/Kg
Aroclor 1254	< 0.1 mg/Kg
Aroclor 1260	< 0.1 mg/Kg

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	86%	30%-134%
Decachlorobiphenyl	86%	30%-125%

[redacted]completed 3/21/97

[redacted]tech PDB

[redacted]approved by

logy & Environment, Inc.
51 Universal

or, MI 48180
N: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02735
p.o. no.

rev: 0

MPLE
CRIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SS-4-3 - Station Location : Soil From Southwest Corner Pit - Sample Date 03/18/97 @ 12:55 - Grab

LYSIS: PCBs

CEDURE: SW-846, Method 8080

ULT:

Compound	Results
Aroclor 1016	< 0.1 mg/Kg
Aroclor 1221	< 0.1 mg/Kg
Aroclor 1232	< 0.1 mg/Kg
Aroclor 1242	< 0.1 mg/Kg
Aroclor 1248	< 0.1 mg/Kg
Aroclor 1254	< 0.1 mg/Kg
Aroclor 1260	1.7 mg/Kg

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	91%	30%-134%
Decachlorobiphenyl	86%	30%-125%

completed: 3/24/97
tech: PDB
approved by:

ology & Environment, Inc.
251 Universal

ior, MI 48180
TN: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02736
p.o. no.

rev: 0

AMPLE
CRIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SS-NP-4 - Station Location : Soil From Northern Spoil Pile - Sample Date 03/18/97 @ 12:45 - Grab

NALYSIS: PCBs

CEDURE: SW-846, Method 8080

ULT:

Compound	Results
Aroclor 1016	< 4 mg/Kg
Aroclor 1221	< 4 mg/Kg
Aroclor 1232	< 4 mg/Kg
Aroclor 1242	< 4 mg/Kg
Aroclor 1248	< 4 mg/Kg
Aroclor 1254	< 4 mg/Kg
Aroclor 1260	122 mg/Kg

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	68%	30%-134%
Decachlorobiphenyl	151%	30%-125%

Elevated PQL due to dilution necessary to bring sample Aroclor concentration within the range of the calibration curve.

DCB is above acceptable range, however, the method requirement of one surrogate being in control has been met, therefore, no corrective action is necessary.

completed:	tech	approved by
03/21/97	PDB	

ology & Environment, Inc.
251 Universal

ylor, MI 48180
TN: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02737
p.o. no.

rev: 0

AMPLE
ESCRIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SS-NP-5 - Station Location : Soil From Northern Spoil Pile - Sample Date 03/18/97 @ 12:50 - Grab

NALYSIS: PCBs

ROCEDURE: SW-846, Method 8080

ESULT:

Compound	Results
Aroclor 1016	< 4 mg/Kg
Aroclor 1221	< 4 mg/Kg
Aroclor 1232	< 4 mg/Kg
Aroclor 1242	< 4 mg/Kg
Aroclor 1248	< 4 mg/Kg
Aroclor 1254	< 4 mg/Kg
Aroclor 1260	146 mg/Kg

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	112%	30%-134%
Decachlorobiphenyl	180%	30%-125%

Elevated PQL due to dilution necessary to bring sample Aroclor concentration within the range of the calibration curve.

DCB is above acceptable range, however, the method requirement of one surrogate being in control has been met, therefore, no corrective action is necessary.

completed	tech	approved by
3/21/97	PDB	

logy & Environment, Inc.
51 Universal

for, MI 48180
N: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02733
p.o. no.

rev: 0

MPLE
CRIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SS-EW-6 - Station Location : Soil From East Side Of Northern Pit - Sample Date 03/18/97 @ 14:10 - Grab

LYSIS: PCBs

CEDURE: SW-846, Method 8080

ULT:

Compound	Results
Aroclor 1016	< 10 mg/Kg
Aroclor 1221	< 10 mg/Kg
Aroclor 1232	< 10 mg/Kg
Aroclor 1242	< 10 mg/Kg
Aroclor 1248	< 10 mg/Kg
Aroclor 1254	< 10 mg/Kg
Aroclor 1260	700 mg/Kg

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	107%	30%-134%
Decachlorobiphenyl	240%	30%-125%

Elevated PQL due to dilution necessary to bring sample Aroclor concentration within the range of the calibration curve.

DCB is above acceptable range, however, the method requirement of one surrogate being in control has been met, therefore, no corrective action is necessary.

completed	tech	approved by
3/24/97	PDB	

1 gy & Environment, Inc.
51 Universal

1 , MI 48180
N: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02739

p.o. no.

rev: 0

MPLE
SCRIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SS-EW-7 - Station Location : Soil From East Side Of Northern Pit - Sample Date 03/18/97 @ 14:15 - Grab

ALYSIS: PCBs

CEDURE: SW-846, Method 8080

SULT:

Compound	Results
Aroclor 1016	< 4 mg/Kg
Aroclor 1221	< 4 mg/Kg
Aroclor 1232	< 4 mg/Kg
Aroclor 1242	< 4 mg/Kg
Aroclor 1248	< 4 mg/Kg
Aroclor 1254	< 4 mg/Kg
Aroclor 1260	90 mg/Kg

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	110%	30%-134%
Decachlorobiphenyl	160%	30%-125%

Elevated PQL due to dilution necessary to bring sample Aroclor concentration within the range of the calibration curve.

DCB is above acceptable range, however, the method requirement of one surrogate being in control has been met, therefore, no corrective action is necessary.

e completed: 4/97

tech: PDB

approved by:

gy & Environment, Inc.
51 Universal

r, MI 48180
N: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02740
p.o. no.

rev: 0

MPLE
RIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SS-EW-8 - Station Location : Soil From East Side Of Northern Pit - Sample Date 03/18/97 @ 14:20 - Grab

YSIS: PCBs

EDURE: SW-846, Method 8080

LT:

Compound	Results
Aroclor 1016	< 2 mg/Kg
Aroclor 1221	< 2 mg/Kg
Aroclor 1232	< 2 mg/Kg
Aroclor 1242	< 2 mg/Kg
Aroclor 1248	< 2 mg/Kg
Aroclor 1254	< 2 mg/Kg
Aroclor 1260	94 mg/Kg

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	102%	30%-134%
Decachlorobiphenyl	150%	30%-125%

Elevated PQL due to ut on necessary to bring sample Aroclor concentration within the range of the calibra on curve.

DCB is above acceptable range, however, the method requirement of one surrogate being in control has been met, therefore, no corrective action is necessary.

ted: | tech: PDB | approved by:

logy & Environment, Inc.
51 Universal

or, MI 48180
N: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02741

p.o. no.

rev: 0

MPLE
SCRIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SS-WW-9 - Station Location : Soil From West Side Of Northern Pit - Sample Date 03/18/97 @ 14:10 - Grab

LYSIS: PCBs

CEDURE: SW-846, Method 8080

SULT:

Compound	Results
Aroclor 1016	< 2 mg/Kg
Aroclor 1221	< 2 mg/Kg
Aroclor 1232	< 2 mg/Kg
Aroclor 1242	< 2 mg/Kg
Aroclor 1248	< 2 mg/Kg
Aroclor 1254	< 2 mg/Kg
Aroclor 1260	74 mg/Kg

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	106%	30%-134%
Decachlorobiphenyl	156%	30%-125%

Elevated PQL due to dilution necessary to bring sample Aroclor concentration within the range of the calibration curve.

DCB is above acceptable range, however, the method requirement of one surrogate being in control has been met, therefore, no corrective action is necessary.

completed	tech	approved by
3/24/97	PDB	

ology & Environment, Inc.
251 Universal
ylor, MI 48180
TN: Brigette Brooks

bec laboratories, inc.

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02742
p.o. no.

rev: 0

AMPLE
SCRIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SS-WW-10 - Station Location : Soil From West Side Of Northern Pit - Sample Date 03/18/97 @ 14:15 - Grab

ALYSIS: PCBs

OCEDURE: SW-846, Method 8080

SULT:

Compound	Results
Aroclor 1016	< 2 mg/Kg
Aroclor 1221	< 2 mg/Kg
Aroclor 1232	< 2 mg/Kg
Aroclor 1242	< 2 mg/Kg
Aroclor 1248	< 2 mg/Kg
Aroclor 1254	< 2 mg/Kg
Aroclor 1260	84 mg/Kg

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	105%	30%-134%
Decachlorobiphenyl	148%	30%-125%

Elevated PQL due to dilution necessary to bring sample Aroclor concentration within the range of the calibration curve.

DCB is above acceptable range, however, the method requirement of one surrogate being in control has been met, therefore, no corrective action is necessary.

e completed:	tech:	approved by:
3/24/97	PDB	

logy & Environment, Inc.
251 Universal

bor, MI 48180
TN: Brigette Brooks

HEADQUARTERS/LABORATORY
705 FRONT STREET
TOLEDO, OHIO 43605
PHONE: (419) 693-5307
FAX: (419) 691-0418

ENVIRONMENTAL LABORATORY
1632 ENTERPRISE PARKWAY
TWINSBURG, OHIO 44087
PHONE: (216) 425-8200
FAX: (216) 425-1349

lab no. 97T02743

p.o. no.

rev: 0

AMPLE
SCRIPTION: Project # KJ5102 - Project Name S05-9702-021 - Station # SS-WW-11 - Station Location : Soil From West Side Of Northern Pit - Sample Date 03/18/97 @ 14:20 - Grab

ALYSIS: PCBs

OCEDURE: SW-846, Method 8080

SULT:

Compound	Results
Aroclor 1016	< 10 mg/Kg
Aroclor 1221	< 10 mg/Kg
Aroclor 1232	< 10 mg/Kg
Aroclor 1242	< 10 mg/Kg
Aroclor 1248	< 10 mg/Kg
Aroclor 1254	< 10 mg/Kg
Aroclor 1260	260 mg/Kg

Surrogate Recovery:

	% Recovery	Acceptable Range
Tetrachloro-m-xylene	115%	30%-134%
Decachlorobiphenyl	190%	30%-125%

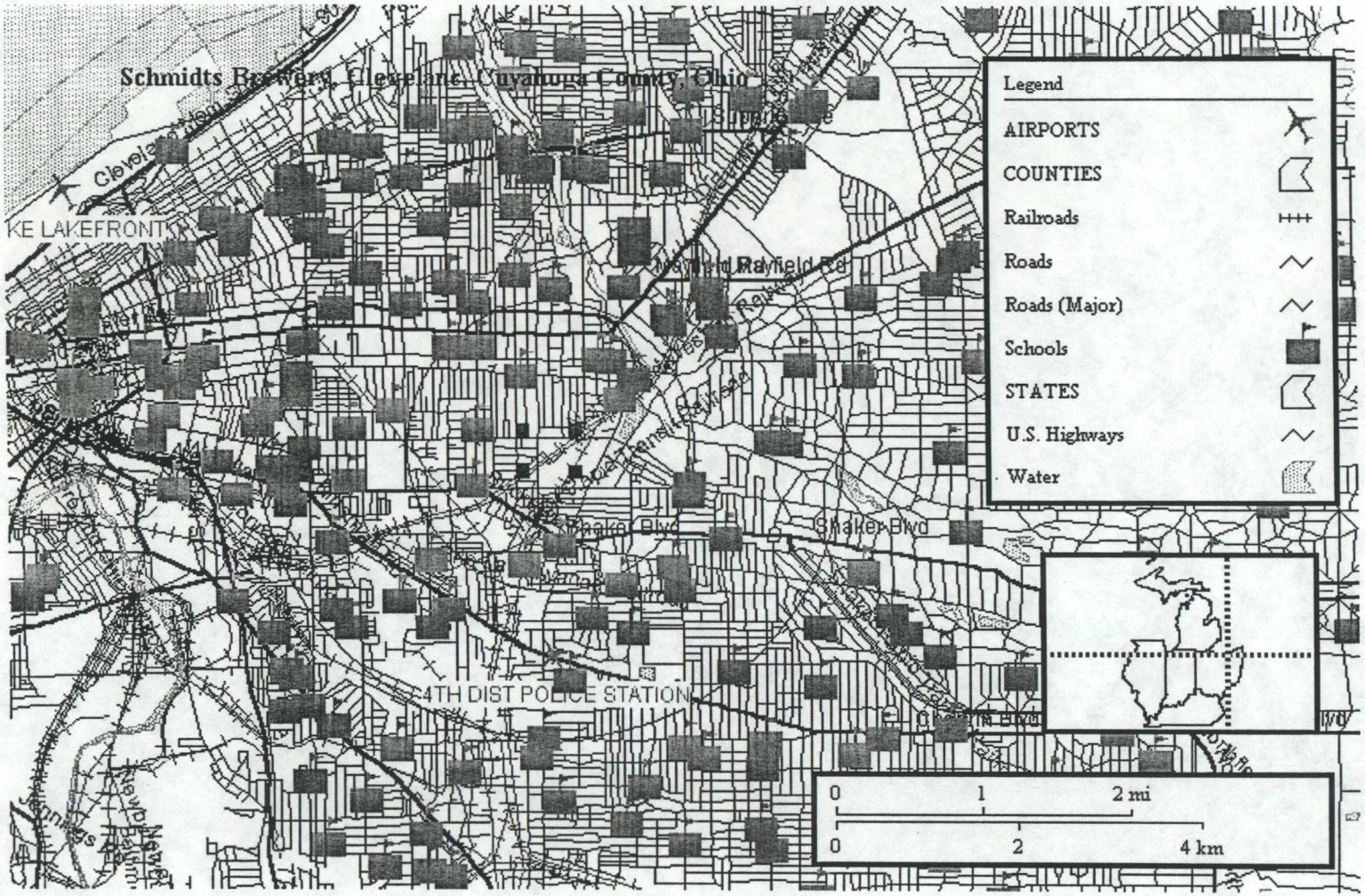
Elevated PQL due to dilution necessary to bring sample Aroclor concentration within the range of the calibration curve.

DCB is above acceptable range, however, the method requirement of one surrogate being in control has been met, therefore, no corrective action is necessary.

completed	tech	approved by
3/24/97	PDB	

Appendix E

U.S. Census Data


Schmidts Brewery, Cleveland, Cuyahoga County, Ohio
Legend
AIRPORTS
COUNTIES
Railroads
Roads
Roads (Major)
Schools
STATES
U.S. Highways
Water
Shaker Blvd
4TH DIST POLICE STATION
0 1 2 mi
0 2 4 km

Age 0 Thru 4:	1756
Age 05 Thru 09:	1568
Age 10 Thru 19:	3201
Age 20 Thru 49:	8316
Age 50 Thru 64:	2556
Age 65 And Over:	3143
Aggregate Personal Income:	154324070
American Indian:	34
Asian/Pacific Islander:	264
Black Population:	17225
Hispanic Population:	135
Land Area (sq. Miles):	3.14
METHOD:	Block Group Proration method.
Minority Population:	17604
Number Of Families:	4317
Number Of Households:	7923
Number Of Persons:	20539
Number Of Persons (stf3):	20705
Other Race:	60
Percent Age 0 Thru 4:	8.5
Percent Age 05 Thru 09:	7.6
Percent Age 10 Thru 19:	15.6
Percent Age 20 Thru 49:	40.5
Percent Age 50 Thru 64:	12.4
Percent Age 65 And Over:	15.3
Percent Asian:	1.3
Percent Below Poverty:	43.5
Percent Black:	83.9
Percent Hispanic:	0.7
Percent Indian:	0.2
Percent Minority:	85.7
Percent Other Race:	0.3
Percent White:	14.4
Persons Below Poverty:	8933
RADIUS:	1.00 miles
SOURCE:	Summary of 57 Block Groups
Water Area (sq. Miles):	0.0
White Population:	2957

Age 0 Thru 4:	8234
Age 05 Thru 09:	7252
Age 10 Thru 19:	13319
Age 20 Thru 49:	38539
Age 50 Thru 64:	11187
Age 65 And Over:	12245
Aggregate Personal Income:	799481375
American Indian:	194
Asian/Pacific Islander:	1166
Black Population:	71396
Hispanic Population:	717
Land Area (sq. Miles):	12.57
METHOD:	Block Group Proration method.
Minority Population:	73274
Number Of Families:	20183
Number Of Households:	36409
Number Of Persons:	90775
Number Of Persons (stf3):	90821
Other Race:	276
Percent Age 0 Thru 4:	9.1
Percent Age 05 Thru 09:	8.0
Percent Age 10 Thru 19:	14.7
Percent Age 20 Thru 49:	42.5
Percent Age 50 Thru 64:	12.3
Percent Age 65 And Over:	13.5
Percent Asian:	1.3
Percent Below Poverty:	41.4
Percent Black:	78.7
Percent Hispanic:	0.8
Percent Indian:	0.2
Percent Minority:	80.7
Percent Other Race:	0.3
Percent White:	19.5
Persons Below Poverty:	37559
RADIUS:	2.00 miles
SOURCE:	Summary of 179 Block Groups
Water Area (sq. Miles):	0.0
White Population:	17742

Age 0 Thru 4:	44156
Age 05 Thru 09:	38593
Age 10 Thru 19:	68304
Age 20 Thru 49:	216645
Age 50 Thru 64:	67165
Age 65 And Over:	70753
Aggregate Personal Income:	4680853027
American Indian:	1562
Asian/Pacific Islander:	5115
Black Population:	235405
FIPS Place Code:	16000
FIPS State Code:	39
FIPS State_County Code:	39035
High Owner Cost:	19.4
High Renter Cost:	90.5
Hispanic Population:	23197
Houses built before 1940:	117948
Land Area (sq. Miles):	77.0
Latitude Internal Point:	+41479700
Lived in same house 1985:	59.0
Longitude Internal Point:	-081678511
Median Household Income:	17822
Median YR house built:	1939
Minority Population:	264064
Number Of Families:	122941
Number Of Households:	199787
Number Of Persons:	505616
Number Of Persons (stf3):	505616
Number of Housing Units:	224311
Other Race:	13300
Owner Occupied:	95765
Percent Age 0 Thru 4:	8.7
Percent Age 05 Thru 09:	7.6
Percent Age 10 Thru 19:	13.5
Percent Age 20 Thru 49:	42.8
Percent Age 50 Thru 64:	13.3
Percent Age 65 And Over:	14.0
Percent Asian:	1.0
Percent Bachelors degree:	7.5
Percent Below Poverty:	28.7

Percent Black:	46.6
Percent High School grad.:	59.2
Percent Hispanic:	4.6
Percent Indian:	0.3
Percent Minority:	52.2
Percent Other Race:	2.6
Percent Owner Occupied:	47.9
Percent Renter Occupied:	52.1
Percent Rural Population:	0.0
Percent Urban:	100.0
Percent White:	49.5
Persons Below Poverty:	142217
Place Name:	CLEVELAND CITY, OH
Renter Occupied:	104022
School Enrollment:	88769
State Abbreviation:	OH
Water Area (sq. Miles):	5.1
White Population:	250234

Appendix F

Telephone Log - U.S. EPA

ecology and environment, inc., telephone log

Contact	Company or Agency	
Joe Fredle	U.S. EPA	
Position	**Contact Phone Number**	
On-Scene Coordinator	216-522-7260	
E & E Employee	**Date**	**Time**
Jeffrey Hughes	February 8, 1999	1000 hours
Site Name and Location		**Job No./Pan**
Schmidt's Brewery, Cleveland, Cuyahoga County, Ohio		KJ5104/6B132MSIXX

No further Removal Section action planned.

Rolloff and all hazardous material removed from site.

Signature/Date

Jeffrey Hughes 2/8/99

Appendix G

Telephone Log - City of Cleveland

ecology and environment, inc., telephone log

Contact	Company or Agency	
Office of Michael Konicek, Director	City of Cleveland, Public Utilities	
Position	**Contact Phone Number**	
	216-664-2440	
E & E Employee	**Date**	**Time**
Christianne Ottinger	March 4, 1999	1130 hours
Site Name and Location		**Job No./Pan**
Schmidt's Brewery, Cleveland, Cuyahoga County, Ohio		KJ5104/6B132MSIXX

Groundwater wells used as a source of potable water are not allowed in the city of Cleveland.

Signature/Date 3/4/99

ecology and environment, inc., telephone log

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Joe Fredle	U.S. EPA	
Position	**Contact Phone Number**	
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Telephone Log - City of Cleveland

ecology and environment, inc., telephone log

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Position	**Contact Phone Number**	
	216-664-2440	
E & E Employee	**Date**	**Time**
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